

ADDENDUM TO INITIAL STUDY

NBC Burbank Studios Master Plan
3000 West Alameda Street

This addendum contains discussion of all "Yes", "Maybe", and "No" responses to the questions in the Environmental Impacts (Part 2) of the Initial Study and the Discussion of Environmental Evaluation (Part III) of the Initial Study.

II. ENVIRONMENTAL IMPACTS

ITEM NO.	RESPONSE
----------	----------

1. Earth

1a-1f. & 1h. Geologic, Soils, and Seismic Safety issues were addressed in the Draft EIR on the Media District Specific Plan, completed in 1990. Additional information on these topics is provided in the technical database compiled for the City's Safety Element in late 1990. These studies have found that the Los Angeles Basin is a geologically complex area with over 100 active faults. Recently completed studies (January 1995) indicate that the six major fault systems in the Los Angeles area are capable of generating large earthquakes. Studies have shown that Burbank could be affected by moderate to large earthquakes (magnitude 6.5 to 7.5) on the Verdugo, Hollywood, Sierra Madre, San Fernando, and San Andreas Faults. The nearest fault to the project sites is the Verdugo fault, which is located approximately 4 miles from the NBC Studios Property. With these conditions, any development within the Los Angeles Basin exposes people to some level of earthquake hazard.

Several effects could result from earthquakes on faults in the Los Angeles Basin. The primary effect would be groundshaking. Mitigation of groundshaking effects is provided through enforcement of the structural and nonstructural seismic design provisions defined for Seismic Zone 4 of the Uniform Building Code, which applies to Burbank. These codes are updated every three years, and through this update process, will incorporate new design provisions as needed. Application of these design provisions over the estimated 8 year build out period of the Master Plan will mitigate potential effects of groundshaking to a level considered less than significant. As individual building projects are reviewed, the City will check for conformance of the designs for these structures with these standards.

In addition, the Verdugo fault zone is considered to represent a surface rupture hazard. As this fault is located several miles away from the project sites, surface rupture is not considered a potential impact. The technical database for the City's Safety Element found that ground conditions conducive to liquefaction exist in Burbank. These conditions exist on about 200 acres located next to the Los Angeles River and 140 acres parallel to Interstate 5.

Geologic and soil studies performed for sites within the Media District indicate that soils consist of native soils and artificial fill in the non to very low expansion range. Given the soil types and depth to groundwater, liquefaction is not considered a hazard.

ITEM NO.	RESPONSE
1a-1f. & 1h (cont.)	<p>Typically, feasible soil engineering measures can reduce or eliminate the potential for settlement or other effects that may be associated with the existing soils conditions on the NBC project site.</p> <p>The construction of the individual building projects allowed under the Master Plan would involve some minor changes to the existing topography and soils conditions as a result of grading and excavation. As the site is flat and contains no unique topographic features, this impact is not considered to be significant. Given the existing site conditions, there is only a minimal potential for erosion to occur during the construction of individual projects. Use of standard construction site management practices will mitigate any potential for erosion during construction.</p> <p>Condition of Approval #2 on the Media District Specific Plan requires a soils engineering report be submitted to, and approved by, the Public Works Director prior to the issuance of a grading permit for any individual building project. Through these studies, any site specific impacts associated with individual building projects will be identified along with appropriate measures needed to reduce any impacts to a level considered less than significant.</p>
1g.	<p>The project site is currently developed and served by urban storm drain systems. Development of new buildings and other structures on the lots under the Master Plan will not result in any significant effects which could modify any natural watercourses or bodies of water. The project site is bisected by a 13 x 5.5 foot reinforced concrete box channel which drains to Johnny Carson park and the ultimately the Los Angeles River.</p>
1i. & 1j.	<p>There are no areas within the City of Burbank designated by the California State Mining and Geology Board as containing designated mineral deposits of statewide or regional significance.</p>
<u>2. Air</u>	
2a.	<p>New development that would occur under the Master Plan will generate additional vehicle trips on local roadways. These additional trips could contribute to carbon monoxide concentrations at major intersections along these roadways that may be considered significant in relation to state and federal standards. Additional analysis is needed to determine the significance of this potential impact.</p>
2b.	<p>Currently, State and federal ambient air quality standards are exceeded in the South Coast Air Basin, which includes the City of Burbank. The vehicle trips associated with the new development allowed under the Master Plan will generate emissions that may exceed recommended thresholds. Condition of Approval #6 of the Media District Specific plan requires all employers and property owners to participate in the Transportation Demand Management (TDM) program developed to mitigate the traffic and air quality impacts of additional development in the Media District. Additional analysis is needed to determine the significance of this potential impact and the suitability of the mitigation program developed for the Media District Specific Plan.</p>

ITEM NO.	RESPONSE
2c.	Build-out of the Master Plan may create fugitive dust emissions as a result of demolition, excavation, grading, and site preparation activities. If not properly mitigated, these emission may be considered objectionable by sensitive receptors, such as St. Joseph's Hospital adjacent to the project site. Conditions of Approval #4 and #104 on the Media District Specific Plan detail construction management measures to be enforced by the City to mitigate construction related air quality impacts. Additional analysis is needed to determine the significance of this potential impact and the suitability of the mitigation program developed for the Media District Specific Plan.
2d.	The NBC Master Plan uses planned for the project do not involve any manufacturing processes that have the potential to affect air moisture or temperature. No significant alteration of the local or regional climate, therefore, is anticipated. The development proposed for the project site includes four 15 story office buildings. Buildings of this height have the potential to affect localized wind patterns. This effect is referred to as "wind jetting". Condition of Approval #100 of the Media District Specific Plan requires that the potential for wind jetting be considered during the review of designs for high-rise buildings. The Master Plan for the project site does not include the architectural design of the buildings. If any potential for this effect exists, alterations to the architectural design of these buildings can be made to mitigate the effects. This potential impact is, therefore, not considered to be significant.
<u>3. Water</u>	
3a.	The project site is currently developed and served by existing storm drains. The NBC site currently has a large amount of impervious surfaces and the new development proposed will not result in a substantial increase in the amount of impervious surfaces that would result in significant changes in absorption rates. The additional development allowed by the NBC Master Plan will result in only minor changes to the runoff amounts and drainage patterns. The project site currently drains to a reinforced concrete box channel. These existing drainage patterns will be maintained. Due to the minor nature of the changes to runoff amounts and direction, no significant impacts are anticipated. Additional analysis of the impact of the project on the existing storm drain system is needed to determine the types of improvements needed.
3b. & 3j.	Additional development on the NBC project site will not alter the amount or direction of any flood waters or impact any existing flood control channels. As discussed above in the response to item 3a, only minor changes to the existing drainage systems are anticipated to support the new development.
3c - 3h.	The NBC Studios property is located in an urbanized environment and will not affect any surface water movements in streamcourses or the amount of water in any water bodies. These projects sites are served by urban storm drains and will not result in any discharge into surface waters. The sites are currently developed and the additional development planned will not result in any changes to the quality of the surface runoff from the site.

ITEM NO.	RESPONSE
----------	----------

- 3i. The additional development proposed will not result in a substantial reduction in the amount of water otherwise available for use in the City of Burbank. Condition of Approval #26 of the Media District Specific plans requires the City of Burbank Public Services Department to pursue the use of reclaimed water in the Media District to mitigate the increase in demand. The City of Burbank also requires that a separate water system for future use of reclaimed water be designed and installed if over one acre of landscaped area will be created or if more than one million gallons of non-potable water will be used annually. Other water conservation measures will also be applied to the project as required by the City. Implementation of these measures will mitigate the impact of the increased demand for water associated with the project to a level considered less than significant.

4. Plant Life

4a. - 4f

The NBC site is located in a fully developed urbanized area. No native vegetation exists on the site that would be impacted by additional development or the introduction of non-naive plant species. Due to the urbanized nature of the surrounding area, no impacts on the replenishment or diversity of native plant species is anticipated.

5. Animal Life

- 5a. - 5f. The project does not contain any native habitat and is not near to any areas of native habitat. As a result, no impact to wildlife species will occur.

6. Noise

- 6a. - 6b. & 6d. The additional development allowed under the NBC Master Plan may increase both short-term and long-term noise levels. Construction of the individual components of the Master Plan will occur over an estimated 8 year time frame. Condition of Approval #7 of the Media District Specific Plan requires that a noise control plan for construction activities be submitted to the Community Development Director prior to the issuance of a grading permit to ensure that noise impacts are minimized. Additional analysis is needed to determine the significance of this potential impact and the suitability of the mitigation program developed for the Media District Specific Plan.

The increase in traffic associated with the project will result in an increase in noise levels on local roadways. Analysis of this potential impact is needed to determine the level of significance. Additional noise sources would be associated with operation of the planned facilities. To reduce the potential of operational noise impacts, the Media District Specific Plan includes noise notification requirements to be followed by the studios. Analysis of potential impacts from operation of the planned facilities is needed to determine the level of significance and need for mitigation.

- 6c. The NBC project site is located outside of the critical noise contours for the airport and will not result in development that is incompatible with the airport noise levels.

ITEM NO.	RESPONSE
----------	----------

7. Light and Glare

7a. & 7c. - 7d. The additional development proposed will result in the introduction of new sources of light on the NBC site. The Media District Specific Plan has standards for lighting design formulated to eliminate any light and glare impacts. Compliance with these standards will be verified during the review of the design of the individual building projects allowed under the Master Plan, therefore no significant impacts are anticipated.

7b. New patterns of shade and shadow will be created which may result in reduced access to sunlight on nearby properties. Analysis of the significance of this potential impact is needed to determine the level of significance and need for mitigation.

8. Land Use

8a. The media uses proposed are consistent with the Restricted Industry Land Use Plan designations for the project site. The NBC project site is located within the Media District Specific Plan Area and is subject to the development standards contained in the City's Media District Overlay Zone. These standards were developed to promote the compatibility of media uses with the sensitivity of residential neighborhoods around the Media District. Analysis of the consistency of the proposed Master Plans with the goals, objectives, requirements, and standards of the Media District Specific Plan is needed.

8b. Analysis of the consistency of the project with applicable policies in the Regional Comprehensive Plan and Guide (RCPG) should be completed. In addition, the consistency of the amount of new employment opportunities associated with the project with the employment projections in the RCPG needs to be analyzed.

8c. The Master Plan will allow additional development on a site that is already used for similar uses. The intensification of uses within the boundaries of this existing studio property will not result in the division of the physical arrangement of the City of Burbank.

8d. The project will involve the demolition of existing structures.

8e. The proposed project will occur within the boundaries of the existing studio properties and will not reduce access to any public facilities.

9. Natural Resources

Construction and operation of the Master Plan will result in an incremental increase in the rate of fossil fuels. Energy conservation measures will be incorporated to minimize energy usage to the extent feasible and the rate of use of energy will be consistent with that of other similar uses. For these reason, the impact of the NBC project on natural resources is considered less than significant.

ITEM NO.	RESPONSE
----------	----------

9. Natural Resources (cont.)

Typically, studio operations only use and store small amounts of common products such as paints, cleaning compounds and similar materials. All materials are stored in accordance with applicable regulations. The new buildings planned will contain similar uses to those currently existing on the studio properties. No significant impacts are anticipated given the type of materials used and stored in association with the planned uses.

10. Risk of Upset

NBC has a Hazardous Materials Business Plan on file with the City of Burbank Fire Department for the existing studio facilities. The list of materials included in these plans show that the studio operations only use and store small amounts of common products such as paints, cleaning compounds and similar materials. All materials are stored in accordance with applicable regulations. The new buildings planned will contain similar uses to those currently existing on the studio properties. Based on the type of materials used and stored in association with these uses and the level of planning for emergencies, no significant impacts are anticipated.

11. Population

The NBC Master Plan will allow the development of additional studio facilities on the project site over an estimated 8 year period. Employment growth resulting from this new development will not have any direct effect on the growth, location, density, or distribution of population in the City of Burbank or the greater Los Angeles area. This employment growth may have result in an indirect increase in population throughout the region. This indirect impact will occur over the estimated 8 year buildout of the facilities allowed by the Master Plan and is not anticipated to be significant.

12. Housing

12 a. The NBC Master Plan will not have affect any existing housing. The employment growth associated with the project may result in an indirect increase in the need for housing in the region over the estimated 8 year buildout of the plan. The City updates the Housing Element of the General Plan in accordance with the provisions of state law to ensure that sufficient housing opportunities are available within the City. Additionally, Condition of Approval #99 on the Media District Specific Plan requires that the city analyze the balance of jobs and housing in the City on an annual basis to help ensure that employment growth does not result in adverse impacts on the supply of housing. As a result of these planning efforts, no significant impacts on housing supply from the proposed project is anticipated.

12b. The NBC Master Plan will not directly impact the City's existing affordable housing stock.

ITEM NO.	RESPONSE
----------	----------

13. Transportation/Circulation

- 13a. & 13c. The additional development allowed under the NBC Master Plan will generate traffic that will use the existing local and regional roadway networks. These new trips will impact the existing intersection and roadway operating conditions. The Conditions of Approval for the Media District Specific Plan include a comprehensive program of measures intended to mitigate the traffic impacts resulting from new development in the Media District. Additional analysis of the traffic impacts of the projects as currently proposed is needed to determine the significance of the potential impacts and the suitability of the mitigation program developed for the Media District Specific Plan.
- 13b. The NBC Master Plan will replace some existing surface parking lots. New parking structures are proposed to accommodate the increased demand. Analysis of the parking requirements of the proposed uses and the amount of parking proposed is needed to determine the significance of any impacts to parking facilities.
- 13d. The NBC Master Plan include no changes to existing public roadways that would alter the existing patterns of circulation. Alteration of the existing circulation patterns is not expected.
- 13e. The project will require the relocation of an existing helispot used by the KNBC news helicopter from one part of the site to another. Potential impacts associated with relocation of this facility need to be assessed. There are no rail or waterborne transportation facilities located near to the project site that would be affected by additional development on this studio property.
- 13f. Implementation of the NBC Master Plan will result in an increase in traffic and changes to existing circulation patterns that may affect traffic safety. A traffic study is needed to determine the potential for significant impacts and the type of mitigation needed.
- 13g. The additional traffic generated by the proposed project will effect existing streets and may require street improvements. A traffic study is needed to determine the potential for significant impacts and the type of mitigation needed.

14. Public Services

- 14a., 14b., & 14d. Implementation of the NBC Master Plan will result in increased demands for police and fire protection services. The impact of increased demand for these services was analyzed in the Media District Specific Plan EIR. The potential for new employment growth to impact parks and recreation facilities and services was also analyzed in the Media District Specific Plan EIR. The Media District Specific Plan EIR determined that there would be an incremental increase in demand on existing recreation facilities and services from new development of media space.

ITEM NO.	RESPONSE
14a., 14b., & 14d. (cont.)	In order to address these impacts the City has adopted a Community Facilities Fee Program for the purpose of ensuring that the current level of service goals of the City as set forth in the "City of Burbank Community Facilities Study" for police, fire and parks and recreation facilities and services are met. Payment of this fee at the time of building permit issuance will mitigate the impact of the project to a level considered less than significant.
14c.	The increase in employees at the NBC site could result in an increase in student enrollment in the Burbank Unified School District as some of the new employees may reside in the City of Burbank. Additional analysis of the specific impacts of the proposed project to schools is needed.
14e.	Development of the NBC Master Plan will occur over an estimated 8 year period. Payment of impact and service connection fees will mitigate any increased costs for maintenance of public services to a level considered less than significant.
14g.	No substantial demands on governmental services other than those discussed above are anticipated as a result of the increased development proposed.
<u>15. Energy</u>	
15a - 15c.	Individual buildings built under the Master Plan will incorporate applicable energy conservation measures and will not use more energy than similar types of projects. The increase in energy demand over the estimated 8 year buildout of the plan will be incremental and within the capacity of the City of Burbank, which provides electricity, and the Southern California Gas Company, which provides natural gas. Additional development on the project site will not result in substantial interference with any identified natural heating or cooling opportunities.
<u>16. Utilities</u>	
16a. - 16f.	<p>Utility system improvements will be necessary depending on the amount of proposed development. The amount of additional development proposed will require improvements to all utility systems. The City of Burbank Public Services Department has determined that the City's electricity subtransmission system may be impacted and that improvements are needed. Existing sewer and water lines on and off the lots will also be impacted. A citywide sewer Master Plan and a water Master Plan for the Media District have been prepared to ensure that adequate facilities are available. Minor modifications to existing storm drainage systems will be needed to accommodate development of the individual building projects that will occur under the Master Plan. Analysis of the significance of the impacts to these systems is needed to determine the improvements needed and the relationship of these impacts to existing Master Plans.</p> <p>Solid waste disposal services to the project site are contracted by private haulers. The level of service provided will not be impacted by the additional development. Condition of Approval #28 of the Media District Specific Plan requires that a solid waste plan to be prepared for individual building projects</p>

ITEM NO.	RESPONSE
----------	----------

16a.- 16f.

(cont.)

that provides for diversion of 50% of the solid waste to be generated by the project by the year 2000. Implementation of this measure will reduce the impact of the increase in solid waste to a level considered less than significant.

17. Human Health

17a.-17c.

The project may involve demolition of structures with building materials containing asbestos. An asbestos survey of the structures to be demolished shall be completed by the applicant. In order to mitigate any potential for asbestos to be released during demolition or renovation of buildings, demolition of any building containing asbestos shall be conducted in accordance with all applicable state and federal regulations for removal and disposal of materials containing asbestos. Specifically, prior to the start of any renovation or demolition project, the applicant shall complete and submit an Asbestos Demolition/Renovation Form as required by the South Coast Air Quality Management District Rule 1403. A report of the engineering evaluation required with this form and the notification will be supplied to the City of Burbank. With this mitigation program, no significant impacts related to the potential release of asbestos are anticipated.

A motor shop is located on the project site which regularly handles hydrocarbon substances used to repair equipment. A Phase I Site Assessment of this building and the surrounding area shall be completed to determine the potential and likelihood of the presence of limited site contamination. Any necessary remediation activities shall be completed as called for in the site assessment.

17d.

The NBC project site is not located in an area of the City considered to have a high fire risk. Individual building will be designed to meet applicable fire code requirements. Meeting these design standards will mitigate any potential impacts to a level considered less than significant.

18. Aesthetics

18a. - 18c.

The NBC Master Plan will allow additional development to occur within the boundaries of the existing studio properties. The overall scale of development proposed for the project site is consistent with the existing scale of development in the immediate area and will not obstruct any scenic vista or views open to the public. The scale of development on the edges of the project site will be intensified. This may change the existing visual characteristics of the edges of the lot as seen from the adjacent residential areas.

The Media District Specific Plan addressed several objectives related to the aesthetic character of studio lots. Analysis of the consistency of the NBC Master Plan with these objectives is needed. In addition, all landscape and other design requirements must meet the standards in the Media District Specific Plan. Conformance with these standards will be reviewed as individual building projects are proposed as required by Condition of Approval #11 of the Media District Specific Plan.

ITEM NO.	RESPONSE
----------	----------

19. Recreation

NBC Studios is located next to Johnny Carson Park. The development of additional studio facilities on the NBC Studios property will not result in any direct impact to this park or other existing parks or other recreational facilities. In addition, the development proposed will occur within the boundaries of the existing studios and will not result in development of any public open space areas.

20. Cultural Resources

- 20a. - 20d. The NBC Studios property has not been previously identified as containing archeological or paleontological resources. There are no known sacred or religious values or sites that would be affected by further development of the project site. The project will involve the demolition of existing structures. No buildings or other resources on the lot have been previously identified as historically or architecturally significant. All of the existing structures were developed in the last 35 years and, therefore, are not old enough to be of historic value.

21. Cumulative Effect

Development of the new studio facilities included in the NBC Master Plan will occur over time with the development of other media related projects in and around the Media District.

III. DISCUSSION OF ENVIRONMENTAL DETERMINATION

Based on available information and discussion contained in Section II, the NBC Master Plan will not result in any significant impacts in the following areas: changes to topography, erosion, alteration of a water body, mineral resources, biological resources, surface and groundwater quality and quantity, compatibility with airport noise levels, risk of upset, alteration of waterborne or rail traffic, communications systems, solid waste and disposal, maintenance of public facilities, and cultural resources. No further analysis of these topics is needed.

The Master Plan will result in impacts that may be significant if mitigation measures are not implemented. These impacts will be reduced to a level considered less than significant through implementation of mitigation measures developed because of the Media District Specific Plan EIR or other City of Burbank Planning programs. These topics include hazards from soils conditions and groundshaking hazards from earthquakes; light and glare impacts from new light sources, population and housing impacts, impacts to police, fire and recreation services, energy usage and human health impacts. These mitigation measures will be implemented as individual building projects allowed by the Master Plan are submitted for review by the City. For this reason, no further analysis of these topics is needed.

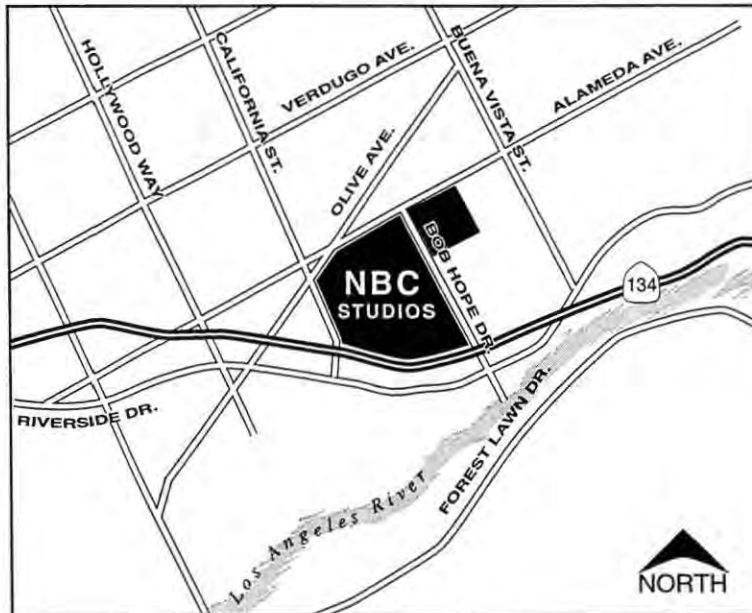
Additional analysis is needed on several environmental topics to determine the significance of any potential impacts and the type of mitigation required, if any. These topics include: Land use consistency, aesthetics and shade and shadow impacts, transportation and circulation, air quality, noise, and impacts to impacts to domestic water, wastewater, drainage, electrical, and natural gas service systems and public schools.

APPENDIX B
Notice of Preparation and Response Letters

NOTICE OF PREPARATION

DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE NBC BURBANK FACILITY MASTER PLAN PROJECT

The Planning Division of the City of Burbank will be acting as the Lead Agency for the environmental review of the proposed Master Plan project for the National Broadcasting Company, Inc. (NBC) Burbank Facility, along with other related discretionary approvals requested by NBC. As the City begins this environmental review process, we are soliciting the views of other public agencies regarding the scope and type of environmental analysis needed to adequately address the potential environmental impacts associated with this project.



The existing NBC Burbank Facility is located on 44 acres in the Burbank Media District Specific Plan Area. As shown in the vicinity map above, the NBC Studios complex is located immediately north of the Ventura Freeway (SR 134). The site is bordered by California Street on the west and Olive and Alameda Avenues on the north. The studio complex is located on both sides of Bob Hope Drive.

The Master Plan for the NBC Studio property was prepared in response to demands for additional on-site space from the production community, including NBC Studios, the in-house production group of the NBC network. Proposed development includes additional studios, production facilities and office space needed to expand production capabilities.

The City of Burbank will need to approve a Planned Development application for the NBC Burbank Facility Master Plan to allow the construction of the proposed new facilities. Under the City's Planned Development Ordinance, an approved Planned Development consists of a Project Report and a Development Agreement. A Project Report includes the following information: (1) a Development Plan showing existing and proposed uses and infrastructure systems; (2) a Development Program Statement describing the proposed uses; and (3) a Development Schedule describing the phasing of the project. The Development Agreement addresses the following topics: (1) Permitted and conditional uses; (2) Density and intensity of uses; (3) Location of uses; (4) Provisions for public improvements; and (5) Property development and public improvement standards. Other approvals sought include a vesting tract map, a street

vacation for Warner Boulevard adjacent to the site and a conditional use permit for building heights up to 15-stories.

The proposed Master Plan would permit construction of approximately 2.1 million square feet of new media related facilities. Approximately 200,000 square feet of existing facilities would be demolished to accommodate the new construction. Taking this demolition into account, the Master Plan would provide for 1.9 million net square feet of new development.

The Master Plan is designed to include flexibility to meet the changing needs of NBC and the media sector, and as proposed is consistent with the Media District Specific Plan, adopted by the City of Burbank to regulate development in the Burbank Media District. A preliminary illustrative concept plan of the Master Plan development shows six new studios, each consisting of approximately 23,000 square feet and four 15-story office buildings, each containing approximately 475,000 square feet. Required parking will be provided through construction of multi-level parking structures, which in the preliminary illustrative concept include over 7,000 spaces.

Development of these facilities will be phased to meet the business needs of NBC. At this time it is anticipated that the first phase of development would be completed by the year 2000, with development of the remainder of the new facilities permitted by 2005. To account for possible changes in NBC business needs, it is proposed that the Development Agreement allow development of the proposed facilities through the year 2017, if necessary.

After completing a preliminary review of the Master Plan application, the City has determined that an EIR should be prepared to assess the potential environmental impacts of this project. Based on this preliminary review, the City has identified the following possible effects of the project as topics for analysis in the EIR: land use, aesthetics, shade and shadow, transportation and circulation, noise, air quality, and public services and utilities.

The City will consider the written comments received in response to this Notice of Preparation in determining the topics to be studied in the Draft EIR. In addition, the City will conduct a public scoping meeting on July 24, 1996 in Burbank to receive comments from the public on the proposed project. Oral and written comments made at this meeting will also be considered in determining the topics to be studied in the Draft EIR.

The input provided by you or your agency will aid in the preparation of a comprehensive document that fully assesses the appropriate environmental issues. Therefore, your comments should identify specific topics of environmental concern and your reasons for suggesting that these topics be analyzed in the EIR.

Please send your WRITTEN comments concerning these projects to:

City of Burbank
Community Development Department
P.O. Box 6459
Burbank, Ca., 91510-6549

Attn: Greg Herrmann

If you have any questions, please call Greg Herrmann at (818) 238-5250.

THE DEADLINE FOR RETURN OF YOUR WRITTEN COMMENTS IS August 9, 1996.
Thank you for your participation in the environmental review of this project.

STATE OF CALIFORNIA - CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

PETE WILSON, Governor

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
101 CENTRE PLAZA DRIVE
MONTEREY PARK, CA 91764-2156
(213) 266-7600
FAX: (213) 266-7600



RECEIVED AUG 15 1996

File No. 700.321

August 12, 1996

Mr. Greg Herrmann
City of Burbank Community Development Dept.
PO Box 8459
Burbank, California 91510-8549

**Re: Notice of Preparation of a Draft Environmental Impact Report, NBC Burbank Facility
Master Plan (SCH No. 96071056)**

The California Regional Water Quality Control Board for the Los Angeles Region (Regional Board) is charged with protection of water quality for all waterbodies in the Los Angeles and Ventura coastal watersheds. The Regional Board protects water quality by implementing regulations, policies, and programs authorized by the State's Porter-Cologne Water Quality Control Act, and by administering certain regulations established by the Federal Clean Water Act. The Regional Board, as a responsible agency under the California Environmental Quality Act (CEQA), also reviews CEQA documents and comments upon water quality issues.

Regional Board staff have reviewed the Notice of Preparation of a Draft Environmental Impact Report, dated July 15, 1996, for the proposed NBC Burbank Facility Master Plan, to be located on both sides of Bob Hope Drive, in the City of Burbank. The National Broadcasting Company, Inc., the applicant, proposes to develop 44 acres to add on-site space to expand production capabilities.

Our review focussed on the water quality issues, such as erosion and debris from construction activities that can impact water quality. Your draft EIR should evaluate these impacts and propose appropriate mitigation measures. For construction activities on any site that totals five acres or more, the developer must file a Notice of Intent to be covered under the State Board's "Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity" (General Permit No. CAS000002). To receive additional information on requirements for storm water discharges and NPDES related matters, please contact Mr. Carlos Santos at (213) 266-7644.

Should you have any questions or wish to discuss our comments, please call Ana Corado at (213) 266-7579.


Wendy Phillips
Chief, Planning Unit

cc: Antero A. Rivasplata, State Clearinghouse

RECEIVED AUG 0 1 1996

STATE OF CALIFORNIA—BUSINESS AND TRANSPORTATION AGENCY

PETE WILSON, Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 7, 120 SO. SPRING ST.
LOS ANGELES, CA 90012-3606
TDD (213) 897-6610

July 31, 1996



IGR/CEQA/NOP
NBC BURBANK FACILITY
MASTER PLAN PROJECT
SCH# 96071055 (7046)
LA-134-2.67

Mr. Greg Herrmann
City of Burbank Community Development Dept.
P. O. Box 6459
Burbank, CA 91510-6549

Dear Mr. Herrmann:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above-referenced proposed NBC Burbank Facility Master Plan that would permit construction of approximately 2.1 million square feet of new media related facilities. This project proposes to develop new facilities in three phases through the year 2017.

Based on the information received, and to assist us in our efforts to completely evaluate and assess the impacts of this project on the State Transportation System, a traffic study in advance of the DEIR should be prepared to analyze the following information:

- 1) Assumptions and methods used to develop trip generation/distribution, percentages and assignments.
- 2) An analysis of ADT, AM, and PM peak-hour volumes for both the existing and future (year 2015) conditions. This should include our mainline freeways, Route 5 (Golden State Freeway), Route 101 (Hollywood Freeway), Route 134 (Ventura Freeway), Route 170 (Hollywood Freeway) and affected ramps, streets, crossroads, and controlling intersections.
- 3) This analysis addressing year 2015 conditions to include project traffic, cumulative traffic generated for all approved developments in the area, Interchange Utilization (I.C.U.) and Level of Service (LOS) of affected freeways and intersections on the State Highway indicating existing and project LOS, and existing + projects(s) + other projects LOS (existing and future).

- 4) Discussion of mitigation measures appropriate to alleviate anticipated traffic impacts. These mitigation discussions should include, but not be limited to the following:
- o financing
 - o scheduling considerations
 - o implementation responsibilities
 - o monitoring plan
- 5) Developer's percent share of the cost, as well as a plan of realistic mitigation measures under the control of the developer should be addressed. Specifically, any assessment fees for mitigation should be of such proportion as to cover mainline highway deficiencies that occur as a result of the additional traffic generated by the project.

A Caltrans Encroachment Permit will be processed for work within the State Right-of-Way, such as signalization, grading, widening, drainage, or freeway mainline highway improvements, etc. A Caltrans Project Study Report (PSR) will be prepared for any work which exceeds \$1,000,000.00, not including right-of-way.

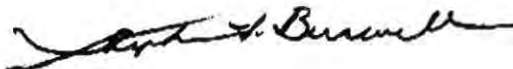
Any transportation of heavy construction equipment which requires the use of oversized-transport vehicles on State Highways will require a Caltrans Encroachment Permit. We recommend that large-sized trucks transporting construction materials, and equipment be limited to off-peak commute periods.

We look forward to reviewing the DEIR. We expect to receive a copy from the State Clearinghouse. However, to expedite the review process, you may send two copies in advance to the undersigned at the following address:

Stephen J. Buswell
IGR/CEQA Coordinator
Caltrans, District 7
Transportation Planning Office, I-10C
120 South Spring Street
Los Angeles, CA 90012

If you have any questions regarding this response, please call me at (213) 897-4429.

Sincerely,



STEPHEN J. BUSWELL
IGR/CEQA Coordinator

CITY OF

Glendale CALIFORNIA

533 E. Broadway, Room 103, Glendale, CA 91206-4366

(818) 548-2140

(818) 548-2144

(818) 548-2115

FAX (818) 240-0392

Planning Division

August 14, 1996

Greg Herrmann
City of Burbank
Community Development Department
P.O. Box 6459
Burbank, CA 91510-6549

Dear Mr. Herrmann:

RE: Notice of Preparation
NBC Burbank Facility Master Plan Draft EIR

The City of Glendale Planning Division and Traffic Engineering Section have reviewed the Notice of Preparation for the NBC Facility Master Plan. Comments from the Traffic Engineering Section are attached. The Planning Division has no additional comments. The contact person for the City of Glendale is David A. Bobardt at the Planning Division. We would appreciate an opportunity to review the Draft EIR and be informed of any public meetings or hearings on this EIR. Thank you for your attention to this request.

John W. McKenna
Director of Planning

David A. Bobardt
David A. Bobardt
Planner

cc: Traffic and Transportation Administrator

DB:db

Attachment



Z-7

CITY OF GLENDALE
INTERDEPARTMENTAL COMMUNICATION

DATE July 31, 1996

TO James E. Glaser, Planning Services Administrator
FROM Jane Baghdanian, Traffic & Transportation Administrator

SUBJECT NBC Burbank Facility Master Plan Project -
EIR Study Issues Concerning Transportation and Circulation

The Traffic & Transportation Section has reviewed the City of Burbank's "Notice of Preparation - Draft Environmental Impact Report for the NBC Burbank Facility Master Plan Project" and offers the following comments concerning the transportation and circulation analyses:

1. SR-134 east of Central Avenue is a Congestion Management Program (CMP) monitoring location in the City of Glendale. This link currently operates at levels of service E and F during the weekday morning and evening peak hours and, moreover, traffic modeling forecasts for the Year 2010 prepared by both SCAG and the City of Glendale indicate a continuation of said congestion. We therefore have concerns regarding potential traffic-related impacts of all large-scale projects proposed in the region at this CMP monitoring location. As a result, we would appreciate the EIR including a traffic level-of-service assessment of the proposed project's impact upon SR-134 east of Central Avenue.
2. We would appreciate receiving a copy of the Draft EIR as soon as said document is available for public review and comment.



cc.: David Bobardt, Planner

JB:TM:ar
File: NBC Burbank Facility



PRINTED ON RECYCLED PAPER.

ROBERT M. YATES
GENERAL MANAGER

CITY OF LOS ANGELES
CALIFORNIA



DEPARTMENT OF
TRANSPORTATION
821 N. FIGUEROA STREET, SUITE 500
LOS ANGELES, CA 90018
(818) 580-1177
FAX: (818) 580-1188

August 9, 1996

RICHARD J. RIORDAN
MAYOR

Alameda Ave. &
Bob Hope Dr.

City of Burbank
Community Development Department
275 East Olive Avenue, P.O.Box 6459
Burbank, CA 91519 - 6459
Attn. Mr. Greg Herrmann

**NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE
NATIONAL BROADCASTING COMPANY (NBC) BURBANK FACILITY MASTER PLAN**

The City of Los Angeles Department of Transportation (LADOT) has reviewed the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the NBC Burbank Facility Master Plan. The Master Plan was prepared in response to demands for additional on-site space from the production community, including NBC studios, the in-house production group of the NBC network. Proposed development includes additional studios, production facilities and office space needed to expand production capabilities.

The existing NBC Facility is on 44 acres in the Burbank Media District Specific Plan Area. The NBC Studios complex is immediately north of the Ventura Freeway (SR 134). The site is bordered by California Street on the west and Olive and Alameda Avenues on the north. The Studio Complex is on both sides of Bob Hope Drive.

The proposed Master Plan would permit construction of approximately 2.1 million square feet of new media related facilities. Approximately 200,000 square feet of existing facilities would be demolished to accommodate the new construction. Considering this demolition, the Master Plan would provide for 1.9 million net square feet of development. Currently it is anticipated that the first phase of development would be completed by the year 2000, with development of the remaining facilities permitted by the year 2005. However, business considerations may require extending final buildout to the year 2017.

City of Burbank

2

August 9, 1996

ASSESSMENT OF TRAFFIC IMPACT

A traffic impact study should be prepared to analyze the potential impacts of the proposed project. The study should include the following steps:

1. Determine the existing Levels of Service at the study intersections.
2. Project the background traffic to the estimated year of completion using an annual growth rate of one percent and assuming a "no project" condition. If a traffic forecast model is used to forecast future traffic volumes, it should be validated against LADOT's EMME/2 Citywide Framework trip table.
3. Add project-related traffic from other proposed developments in the area. In the City of Los Angeles area LADOT and the Department of City Planning should be contacted for this information.
4. Determine traffic that would be added during the a.m. and p.m. weekday peak hours because of the proposed development.
5. Analyze the impact of project-generated traffic on the circulation system by comparing the Levels of Service both without and with the project.
6. Coordinate your study with affected governmental agencies, such as Caltrans, Los Angeles County, other Los Angeles City departments, and other cities.

MITIGATION MEASURES

If any adverse impact is anticipated, a discussion of the realistic mitigation measures that are under control of the developer should be included. If street improvements are proposed as mitigation measures for any location in the City of Los Angeles, then scale drawings of the proposed street improvement should also be included.

STUDY PARAMETERS

At a minimum include the following study locations in the City of Los Angeles:

City of Burbank

3

August 9, 1996

1. Barham Bl. & Forest Lawn Dr.
2. Barham Bl. & Cahuenga Bl. East/Coral Dr.
3. Barham Bl. & Cahuenga Bl. West
4. Cahuenga Bl. West & 101 Fwy. Southbound Off Ramp N/O Barham Bl.
5. Camarillo & Cahuenga Bl.
6. Cahuenga Bl. & Riverside Dr.

The City of Los Angeles may request additional intersections if preliminary results of the traffic study show additional impacts.

- Traffic Counts** - Count data should not be more than one year old.
- Weekday counts should be taken from 7:00 a.m. to 10:00 a.m. and from 3:00 p.m. to 6:00 p.m.
- Study Hours** - Both a.m. and p.m. weekday peak hours
- Capacity Calculations** - CMA method should be used. Worksheets and counts should be included with the report.
- Annual Growth Rate** - One percent per year or based upon model output.
- Project Description** - A detailed description of the proposed project uses and their corresponding square footage is necessary.
- Traffic Generation** - Institute of Transportation Engineer's Trip Generation. 5th Edition rates and/or prior studies with similar uses.

Significant Impact

For study intersections in the City of Los Angeles, a transportation impact on an intersection will be deemed "significant" according to the following table and formula:

City of Burbank

4

August 9, 1996

Final Volume/Capacity (V/C)Project-Related Increase in Volume/Capacity (V/C)

0.701 - 0.800

equal to or greater than 0.040

0.801 - 0.900


equal to or greater than 0.020

0.901 or greater

equal to or greater than 0.010

For purposes of this calculation, final V/C will mean the V/C ratio at an intersection considering impacts with a Project and without proposed Traffic Impact Mitigation.

Should any questions arise, please contact Charles King at (213) 580-5203.



ROBERT T. TAKASAKI

Senior Transportation Engineer

cgk/a:nbenop

cc: Council District No. 4
LADOT, East Valley District

BURBANK UNIFIED SCHOOL DISTRICT

330 NORTH BUENA VISTA STREET • BURBANK • CA • 91505-3698

TELEPHONE • (818) 558-4600

FAX • (818) 846-9483

August 2, 1996

City of Burbank
Community Development Department
P.O. Box 6459
Burbank, CA 91510

ATTN: Greg Herrmann**RE: NBC Burbank Facility Master Plan Project****Dear Mr. Herrmann:**

Thank you for the Notice of Preparation of the draft Environmental Impact Report (EIR) for the NBC Burbank Facility Master Plan Project, for which the City of Burbank is the Lead Agency. Over the years, NBC has been a supporter of BUSD efforts and has made considerable contributions to the District schools. The District will do its part to assist the EIR process to proceed efficiently.

The Notice states that the City of Burbank has identified public services as a type of analysis in the EIR. We presume that this includes public schools; therefore the City of Burbank has already recognized the need for assessment of the impact of the proposed project on Burbank schools.

The BUSD suggests that the draft EIR include a detailed assessment of the project impact on our schools. The proposed Master Plan would permit construction of approximately 2.1 million square feet of new media related facilities. Taking the proposed demolition of some existing buildings into account, the Master Plan would provide for 1.9 million net square feet of new development. This, in turn, would result in a large increase in jobs and, consequently, households. Many of the new households would include children attending District schools. Therefore, the project impact on our facilities would be significant. In fact, California law envisions residential construction and commercial/industrial construction as joint causes of school enrollment impacts.

The District would be happy to provide information to the City of Burbank to assist in the preparation of the EIR. Our updated Development Impact Fee Study contains detailed information on the impact of new developments on Burbank schools, including, but not limited to, projected enrollment growth, cost of school facilities to accommodate enrollment

Mr. Greg Herrmann
August 2, 1996
Page Two

growth, etc. I believe the City has a copy of the most updated report. We can provide you with additional copies if necessary. Please contact me for any additional information in this regard.

Thank you again for the opportunity to provide input.

Sincerely,

A handwritten signature in black ink, appearing to read 'All A. Klafar', is written over the typed name. The signature is stylized with a long horizontal stroke and a vertical stroke extending downwards.

All A. Klafar, Assistant Superintendent
Planning, Development & Facilities

AK:mf
c:\mlsc\mbcproj

APPENDIX C

Air Quality Data

Smog and its Causes

Smog is a general term based on the words smoke and fog that is used to describe dense, visible air pollution. Although some air pollutants are colorless, smog is commonly used to describe the general concentrations of pollutants in the air. Smog is formed when combustion emissions and gaseous emissions, such as VOC, NO_x, and SO_x, undergo photochemical reactions in sunlight to form ozone (O₃). Ozone is a gas that, in the upper atmosphere, helps to shield the Earth from harmful radiation. However, in the lower atmosphere where people live, ozone poses health risks and damages crops, rubber, and other materials. Particulates, such as soil and dust materials, and vehicle exhaust particulates often mix with ozone, CO, and other compounds and create a brownish, haze in the air. "Smog episode" warnings occur when an occurrence of high concentrations of ozone is predicted that could endanger or cause harm to the public.

The topography and climate of the South Coast Air Basin combine to make it an area of high smog potential. During the summer months, a warm air mass frequently descends over the lower, cool, moist marine air layer. The warm upper layer forms a cap over the marine layer and inhibits the air pollutants generated near the ground from dispersing upward. Light summer winds and the surrounding mountains further limit the horizontal disbursement of the pollutants. Concentrating volumes of pollutants in this manner allows the summer sunlight to generate high levels of smog. In the winter, cool ground temperatures and very light winds cause extremely low inversions and air stagnation which traps CO and NO_x during the late night and early morning hours. On days when no inversions occur, or when winds average 25 miles per hour or more, there will be no important smog effects in summer or winter.

Air Quality Management Regulatory Agencies and Responsibilities

Air quality within the South Coast Basin is addressed through the efforts of various Federal, State, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies primarily responsible for improving the air quality within the Basin are discussed below along with their individual responsibilities.

(1) U. S. Environmental Protection Agency

The U. S. Environmental Protection Agency (U.S. EPA) is responsible for enforcing the 1990 amendments to the Federal Clean Air Act (CAA) and the national ambient air quality standards (Federal standards) that it establishes. These standards identify levels of air quality for six "criteria" pollutants which are considered the maximum levels of ambient (background) air pollutants considered safe, with an adequate margin of safety, to protect the public health and welfare. The six criteria pollutants include ozone, CO, nitrogen dioxide (NO₂ - a form of NO_x), sulfur dioxide (SO₂ - a form of SO_x), PM₁₀, and lead. The U.S. EPA also has regulatory and enforcement jurisdiction over emission sources beyond State waters (outer continental shelf), and those that are under the exclusive authority of the Federal government, such as aircraft, locomotives, and interstate trucking.

In response to its enforcement responsibilities, the U.S. EPA requires each state to prepare and submit a State Implementation Plan (SIP) that describes how the state will achieve the Federal standards by specified dates, depending on the severity of the air quality within the state or air basin. The South Coast Air Basin is classified by the U.S. EPA as an extreme nonattainment area for ozone -- the only area in the nation to be classified as such -- a serious nonattainment area for CO, and a nonattainment area for NO_x and PM₁₀. Under the compliance timetables which pertain to ozone, the Basin must achieve attainment status for ozone within 20 years. To do so, the Basin must show a 15 percent reduction from its 1990 Basin-wide emissions inventory within six years, and a 3 percent annual reduction thereafter for the remainder of the 20 years. For the other nonattainment pollutants, the Basin must achieve attainment status by the most expeditious date that can be achieved, but no later than five years from the date the area was designated nonattainment. If the Basin experiences difficulty doing so, the U.S. EPA may extend the period for attainment for an additional 10 years.

(2) California Air Resources Board

The California Air Resource Board (ARB), a department of the California Environmental Protection Agency (CALEPA), oversees air quality planning and control throughout California. It is primarily responsible for ensuring implementation of the 1989 amendments to the California Clean Air Act (CCAA), responding to the Federal CAA requirements, and for regulating emissions from motor vehicles and consumer products within the State. The ARB has established emission standards for vehicles sold in California and for various types of equipment available commercially. It also sets fuel specifications to further reduce vehicular emissions.

The amendments to the CCAA establish ambient air quality standards for the State (State standards) and a legal mandate to achieve these standards by the earliest practicable date. These standards apply to the same six criteria pollutants as the Federal CAA, and also include sulfate, visibility, hydrogen sulfide, and vinyl chloride. They are also more stringent than the Federal standards and, in the case of PM_{10} and SO_2 , far more stringent.

Based on monitored pollutant levels, the CCAA divides nonattainment areas into three categories -- moderate, serious, severe, and extreme -- to which progressively more stringent requirements apply. The Basin is classified as an extreme nonattainment area for ozone and a serious nonattainment area for CO and NO_2 . Under these classifications, an air quality management plan is required to be prepared to include specific emission reduction strategies, and to meet specified milestones in implementing emission controls to achieve more healthful air. The new control strategies include an indirect and area source control program, best available retrofit control technology for existing sources, a program to mitigate all emissions from new and modified permitted stationary sources (no net increase), transportation control measures, and substantial use of low-emission vehicles (e.g., natural gas, or methanol-powered vehicles) by fleet operators. The CCAA also requires control measures to be ranked by priority and cost-effectiveness. The air quality management plans must achieve a reduction in emissions of 5 percent or more per year, or 15 percent or more in a three year period for pollutants causing severe nonattainment.

(3) Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a council of governments for the Counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. SCAG is a regional planning agency and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SCAG also serves as the regional clearinghouse for projects requiring environmental documentation under Federal and State law. In this role, SCAG reviews proposed projects to analyze their impacts on SCAG's regional planning efforts.

Although SCAG is not an air quality management agency, it is responsible for several air quality planning issues. Specifically, as the designated Metropolitan Planning Organization (MPO) for the southern California region, it is responsible, pursuant to §176(c) of the 1990 amendments to the CAA, for providing current population, employment, travel, and congestion projections for regional air quality planning efforts. It is required to quantify and document the demographic and employment factors influencing expected transportation demand, including land use forecasts. Pursuant to California Health and Safety Code Section §40460(b), SCAG is also responsible for preparing and approving the portions of the Basin's air quality management plans relating to demographic projections and integrated regional land use, housing, employment, and transportation programs, measures, and strategies. SCAG's method of accomplishing these requirements is through the preparation of the Growth Management Chapter of the Regional Comprehensive Plan and Guide (RCPG).

(4) South Coast Air Quality Management District

The management of air quality in the Basin is the responsibility of the South Coast Air Quality Management District (SCAQMD). This responsibility was given to the SCAQMD by the California Legislature's adoption of the 1977 Lewis-Presley Air Quality Management Act which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in the areas under its jurisdiction into conformity with Federal and State air quality standards. Specifically, the SCAQMD has the responsibility to monitor ambient air pollutant levels throughout the Basin and to develop and implement attainment strategies to ensure that future emissions will be within Federal and State standards.

(a) SCAQMD Air Quality Management Plan

As discussed previously, the Federal and State Clean Air Acts require the preparation of plans to reduce air pollution to healthful levels. The SCAQMD has responded to this requirement by preparing a series of air quality management plans, the most recent of which was adopted by the governing board on September 9, 1994 and the ARB on November 15, 1994. The 1994 Air Quality Management Plan (AQMP) was prepared to comply with the provisions of the 1989 California Clean Air Act and the 1990 Federal Clean Air Act amendments, to accommodate growth, to reduce the high levels of pollutants within the Basin, to meet State and Federal air quality standards, and to minimize the fiscal impact pollution control measures have on the local economy. Principal control policies and measures for improving the Basin's air quality include: extensive use of clean fuels, transportation control measures,

market incentives, and facility permitting. Many of these policies and measures have been adopted as rules by the SCAQMD Governing Board or may be adopted as rules in the future.

The air quality levels projected in the AQMP are based on several assumptions. For example, the AQMP assumes that general development associated with general plans, specific plans (such as the proposed Newhall Ranch Specific Plan), residential projects, and wastewater facilities will be constructed in accordance with population growth projections identified by SCAG in its most current version of the RCPG. The AQMP also assumes that general development projects will implement strategies (mitigation measures) to reduce emissions generation during the construction and operational stages of development. The Specific Plan's consistency with the AQMP is discussed later in this EIR section.

(b) SCAQMD Rules and Regulations

The SCAQMD is responsible for limiting the amount of emissions that can be generated throughout the Basin by various stationary and mobile sources. Specific rules and regulations have been adopted by the SCAQMD Governing Board which limit the emissions that can be generated by various uses and/or activities, and identify specific pollution reduction measures which must be implemented in association with various uses and activities. These rules not only regulate the emissions of the six criteria pollutants, but also toxic emissions and acutely hazardous materials.¹ They are also subject to ongoing refinement by the SCAQMD.

Emissions sources subject to these rules are regulated through the SCAQMD's permitting process. Through this permitting process, the SCAQMD also monitors the amount of stationary emissions being generated and uses this information in developing the AQMP. The proposed Specific Plan would be subject to SCAQMD rules and regulations to reduce specific emissions and to mitigate potential air quality impacts. These are identified in the Mitigation Measures discussion in this EIR section.

(c) CEQA Air Quality Handbook

In 1994, the SCAQMD prepared its CEQA Air Quality Handbook as a guidance document to assist local government agencies and consultants in preparing environmental documents for projects subject to the California Environmental Quality Act (CEQA). The Handbook is an advisory document and local jurisdictions are not required to utilize the methodology outlined therein. This document describes the

¹ Defined by the Federal government as an air pollutant to which no ambient air quality standard is applicable and which, in the judgment of the administrator of the U.S. EPA, may result in an increase in mortality, serious irreversible illness, or incapacitating reversible illness.

criteria that the SCAQMD uses when reviewing and commenting on the adequacy of environmental documents, such as this EIR. It recommends thresholds for use in determining whether projects would have significant adverse environmental impacts, identifies methodologies for predicting project emissions and impacts, and identifies measures that can be used to avoid or reduce air quality impacts. Although the CEQA Air Quality Handbook has been adopted by the Governing Board of the SCAQMD, it does not, nor does it intend to supersede a local jurisdiction's CEQA procedures. This EIR was prepared following the recommendations of the SCAQMD found in the SCAQMD's CEQA Air Quality Handbook.

(5) Local Governments

Local governments, such as the County of Los Angeles, have the authority and responsibility to reduce air pollution through their police power and land use decision-making authority. Specifically, local governments are responsible for the mitigation of emissions resulting from land use decisions and for the implementation of transportation control measures as outlined in the AQMP.² The AQMP assigns local governments certain responsibilities to assist the Basin in meeting air quality goals and policies. In general, a first step toward implementation of a local government's responsibility is accomplished by identifying air quality goals, policies, and implementation measures in its general plan. Through capital improvement programs, local governments can fund infrastructure that contributes to improved air quality, by requiring such improvements as bus turnouts, energy-efficient street lights, and synchronized traffic signals.³ In accordance with CEQA requirements and the CEQA review process, local governments assess air quality impacts, require mitigation of potential air quality impacts by conditioning discretionary permits, and monitor and enforce implementation of such mitigation.⁴

² South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, November 1993), p. 2-2.

³ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, November 1993), p. 2-2.

⁴ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, November 1993), p. 2-3.

Carbon Monoxide (CO) Hotspots - Impact Analysis Methodology -

Motor vehicles are the primary sources of pollutants in the vicinity of the project site. Although these vehicles generate several types of emissions on a regional basis (as discussed previously), CO is considered the foremost localized problem related to motor vehicle sources.⁵ Traffic-congested roadways and intersections have the potential to generate localized high levels of CO within approximately 1,000 feet of the roadways. Localized areas where ambient concentrations exceed State and/or Federal standards are termed CO "hotspots."

The SCAQMD recommends the use of CALINE4, a dispersion model developed by the California Department of Transportation (Caltrans) for predicting CO concentrations near roadways, as the preferred method of estimating localized pollutant concentrations at various locations. CALINE4 adds roadway-specific CO emissions calculated from peak traffic volumes to background ambient CO air concentrations. For this analysis, CO concentrations were calculated based on a CALINE4 screening procedure developed by Caltrans.⁶ This methodology assumes worst-case conditions (i.e., wind speed of less than one meter per second and extreme atmospheric stability) and provides a screening of maximum, worst-case, CO concentrations. Traffic volumes utilized in the analysis were taken from the project traffic report.

The SCAQMD also recommends that the CO analysis focus on "sensitive receptors." Sensitive receptors are populations that are more susceptible to the effects of air pollution than is the population at large.⁷ The SCAQMD identifies the following as sensitive receptors: long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, child care centers, and athletic facilities.⁸

⁵ State of California Department of Transportation, Office of Transportation Laboratory, Air Quality Technical Analysis Notes (Sacramento, California: California Department of Transportation, June 1988, p. 1100-1.

⁶ Vicente J. Garza, Peter Graney, and Daniel Sperling, Draft Final Transportation Project-Level Carbon Monoxide Protocol (Sacramento, California: California Department of Transportation).

⁷ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, November 1993), p. 5-1.

⁸ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, November 1993), p. 5-7.

Existing (1996) Carbon Monoxide (CO) Concentrations

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Pass Avenue and Riverside Drive
 Analysis Condition: 1996 Existing
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 12.3
 Background 8-hour CO Concentration (ppm): 8.5
 Persistence Factor: 0.7
 Analysis Year: 1995

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway: Pass Avenue	At Grade	4	20	20
East-West Roadway: Riverside Drive	At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	80	218	57		N	197	516	67	
W	<	v	>	E	W	<	v	>	E
48 ^				13	72 ^				30
281 >				648	703 >				477
40 v				57	270 v				86
S	559	635	44		S	221	465	18	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	1,553	N-S Road	1,576
E-W Road	1,656	E-W Road	1,940

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	1,553	*	17.90	+	100,000
E-W Road	5.4	3.8	1.6	*	1,656	*	17.90	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	1,576	*	17.90	+	100,000
E-W Road	5.4	3.8	1.6	*	1,940	*	17.90	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	14.5	14.8	10.2
100 Feet from Roadway Edge	13.9	14.1	9.8
300 Feet from Roadway Edge	13.1	13.2	9.1

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Pass Avenue and Olive Avenue
 Analysis Condition: 1996 Existing
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 12.3
 Background 8-hour CO Concentration (ppm): 8.5
 Persistence Factor: 0.7
 Analysis Year: 1995

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway: Pass Avenue	At Grade	4	20	20
East-West Roadway: Olive Avenue	At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	0	874	24		N	0	542	29	
W	<	v	>	E	W	<	v	>	E
0 ^				8	0 ^				63
0 >				0	0 >				0
0 v				1,820	0 v				1,281
	<	^	>			<	^	>	
0		321	1,183		0		513	1,656	
S					S				

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	4,198	N-S Road	3,992
E-W Road	3,035	E-W Road	3,029

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	4,198	*	17.90	+	100,000
E-W Road	2.2	1.7	1.1	*	3,035	*	17.90	+	100,000
P.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	3,992	*	17.90	+	100,000
E-W Road	2.2	1.7	1.1	*	3,029	*	17.90	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	17.6	17.4	12.2
100 Feet from Roadway Edge	16.1	15.9	11.1
300 Feet from Roadway Edge	14.1	14.0	9.8

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Pass Avenue and Alameda Avenue
 Analysis Condition: 1996 Existing
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 12.3
 Background 8-hour CO Concentration (ppm): 8.5
 Persistence Factor: 0.7
 Analysis Year: 1995

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway: Pass Avenue	At Grade	4	20	20
East-West Roadway: Alameda Avenue	At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	152	1,130	587	E	N	200	520	326	E
W	<	v	>	W	W	<	v	>	W
62 ^				79	124 ^				182
466 >				348	580 >				579
21 v				62	28 v				57
S	20	149	45	S	S	33	498	88	S

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	2,159	N-S Road	1,850
E-W Road	1,587	E-W Road	1,812

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations			Traffic Volume	Emission Factor				
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	2,159	*	17.90	÷	100,000
E-W Road	2.2	1.7	1.1	*	1,587	*	17.90	÷	100,000
P.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	1,850	*	17.90	÷	100,000
E-W Road	2.2	1.7	1.1	*	1,812	*	17.90	÷	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	15.0	14.8	10.4
100 Feet from Roadway Edge	14.3	14.1	9.9
300 Feet from Roadway Edge	13.2	13.2	9.2

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Hollywood Way and Alameda Avenue
 Analysis Condition: 1996 Existing
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 12.3
 Background 8-hour CO Concentration (ppm): 8.5
 Persistence Factor: 0.7
 Analysis Year: 1995

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway: Hollywood Way	At Grade	4	10	10
East-West Roadway: Alameda Avenue	At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	522	1,125	105		N	313	883	95	
W	<	v	>		W	<	v	>	
77 ^				225	148 ^				502
400 >				1,109	600 >				1,034
78 v				197	133 v				97
	<	^	>			<	^	>	
S	124	255	16		S	408	793	30	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road 2,309
 E-W Road 2,310

N-S Road 2,734
 E-W Road 2,636

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	2,309	*	34.80	÷	100,000
E-W Road	5.4	3.8	1.6	*	2,310	*	17.90	÷	100,000
P.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	2,734	*	34.80	÷	100,000
E-W Road	2.2	1.7	1.1	*	2,636	*	17.90	÷	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	16.3	18.5	12.8
100 Feet from Roadway Edge	15.2	16.7	11.6
300 Feet from Roadway Edge	13.8	14.3	9.9

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Hollywood Way and Verdugo Avenue
 Analysis Condition: 1996 Existing
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 12.3
 Background 8-hour CO Concentration (ppm): 8.5
 Persistence Factor: 0.7
 Analysis Year: 1995

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway:	Hollywood Way	At Grade	4	10
East-West Roadway:	Verdugo Avenue	At Grade	4	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	110	1,151	39	E	N	114	979	887	E
W	<	v	>	W	W	<	v	>	W
254 ^				63	282 ^				83
279 >				247	463 >				412
70 v				148	52 v				104
S	29	533	43	S	S	83	1,119	107	S

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	2,150	N-S Road	3,464
E-W Road	989	E-W Road	2,056

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	2,150	*	34.80	÷	100,000
E-W Road	2.2	1.7	1.1	*	989	*	17.90	÷	100,000
P.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	3,464	*	34.80	÷	100,000
E-W Road	2.2	1.7	1.1	*	2,056	*	17.90	÷	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	16.7	19.6	13.6
100 Feet from Roadway Edge	15.4	17.5	12.1
300 Feet from Roadway Edge	13.7	14.6	10.1

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

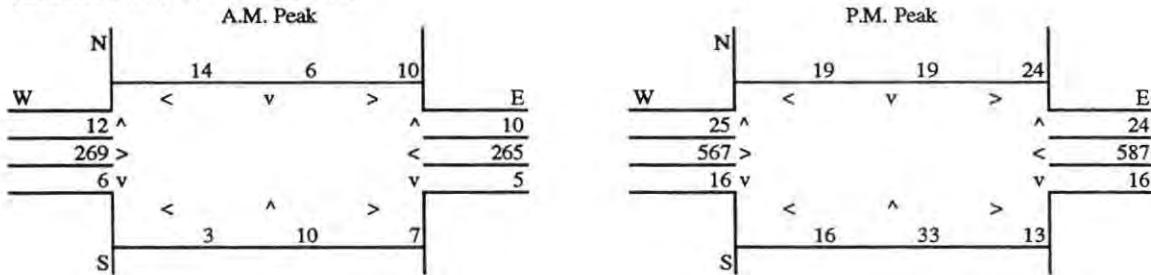
Project Title: NBC Studios
 Intersection: California Street and Verdugo Avenue
 Analysis Condition: 1996 Existing
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 12.3
 Background 8-hour CO Concentration (ppm): 8.5
 Persistence Factor: 0.7
 Analysis Year: 1995

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway:	California Street	At Grade	20	20
East-West Roadway:	Verdugo Avenue	At Grade	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES



Representative Traffic Volumes (Vehicles per Hour)

N-S Road	62	N-S Road	144
E-W Road	569	E-W Road	1,231

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations			Traffic Volume	Emission Factor				
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	62	*	17.90	÷	100,000
E-W Road	5.4	3.8	1.6	*	569	*	17.90	÷	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	144	*	17.90	÷	100,000
E-W Road	5.4	3.8	1.6	*	1,231	*	17.90	÷	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	12.9	13.5	9.4
100 Feet from Roadway Edge	12.7	13.2	9.1
300 Feet from Roadway Edge	12.5	12.7	8.8

Table 11-7c. Mitigation for Stationary Source Emissions - Operation (Industrial)

Mitigation Measure	Emission Reduction Efficiency*			
	ROC	NO _x	CO	PM ₁₀
• Provide shade trees to reduce building heating/cooling needs	Negl.	Negl.	Negl.	0.5%
• Use energy-efficient and automated controls for air conditioning	Negl.	Negl.	Negl.	1%
• Use double-glass-paned windows	Negl.	0.5%	Negl.	1%
• Use energy efficient low-sodium parking lot lights	Negl.	0.5%	Negl.	1%
• Provide adequate ventilation systems for enclosed parking facilities	Negl.	Negl.	Negl.	Negl.
• Use lighting controls and energy-efficient lighting	Negl.	1%	0.5%	2.5%
• Use light-colored roof materials to reflect heat	Negl.	Negl.	Negl.	0.5%
• Orient buildings to the north for natural cooling and include passive solar design (e.g., daylighting)	2%	3%	2.5%	5.5%
• Increase walls and attic insulation beyond Title 24 requirements	Negl.	1%	0.5%	3%
• Improved storage and handling of source materials	NQ	NQ	NQ	NQ
• Materials substitution (e.g., use water-based paints, life-cycle analysis)	NQ	NQ	NQ	NQ
• Modify manufacturing processes (e.g., reduce process stages, closed-loop systems, materials recycling)	0.5%	2%	1.5%	6%
• Resource recovery systems that redirect chemicals to new production processes	3.5%	3%	3%	1.5%
NQ = Not Quantified Negl. = Negligible (less than 0.05%)				

* These efficiencies represent additive reductions from facility operations, specifically unmitigated emissions from Stationary Sources (i.e., Energy Use, Area Source, Stationary Source). These efficiencies can be subtracted from the corresponding unmitigated emissions from this category (Table 9-8). These data will be updated as more information becomes available. More detailed descriptions of mitigation measures are included in Appendix 11.

Estimated Emission Reduction Efficiencies

NBC Studios
ESTIMATED EMISSION REDUCTION EFFICIENCIES - Recommended Mitigation Measures
(SCAQMD CEQA Air Quality Handbook Table 11-6)

Land Use	Emissions in Pounds per Day				
	CO	VOC	NOx	SOx	PM10
Total Emissions					
Vehicular Sources	1,062.6	59.1	107.3	10.8	2,413.6
Energy Generation and Use	7.7	0.7	44.4	3.6	1.2
Total Non-Reduced Emissions	1,070.3	59.8	151.7	14.4	2,414.8
MEASURES, EFFICIENCIES, AND REDUCTIONS					
Energy Generation and Use					
Use Automatic Lighting/Energy Efficient Lighting	7.0%	3.0%	8.5%	0.0%	19.5%
	0.5	0.0	3.8	-	0.2
Use Light-Colored Roof Materials	1.0%	1.0%	1.0%	0.0%	0.5%
	0.1	0.0	0.4	-	0.0
Comply with Title 24	9.5%	10.0%	9.0%	0.0%	7.0%
	0.7	0.1	4.0	-	0.1
Vehicular Sources					
Provide Preferential Parking Spaces for Carpools and Vanpools	0.1%	0.1%	0.1%	0.0%	0.1%
	1.1	1.1	1.1	-	1.1
Implement Home Dispatching System	0.1%	Negl.	0.1%	0.0%	0.1%
	1.1		1.1	-	1.1
Implement Compressed Work Week Schedule (9/80)	1.0%	0.8%	1.0%	0.0%	1.0%
	10.6	8.5	10.6	-	10.6
Utilize Satellite Offices	0.1%	0.1%	0.1%	0.0%	0.1%
	1.1	1.1	1.1	-	1.1
Establish a Home-Based Telecommuting Program	0.1%	0.1%	0.1%	0.0%	0.1%
	1.1	1.1	1.1	-	1.1
Provide On-Site Child Care and After-School Facilities	0.1%	0.1%	0.1%	0.0%	0.1%
	1.1	1.1	1.1	-	1.1
Establish a Shuttle Service From Residential Core Areas	0.1%	0.1%	0.1%	0.0%	0.1%
	1.1	1.1	1.1	-	1.1
Provide Shuttles to Major Rail Stations and Multi-Modal Ctrs.	0.1%	0.1%	0.1%	0.0%	0.1%
	1.1	1.1	1.1	-	1.1
Provide Bicycle Improvements	0.3%	0.2%	0.3%	0.0%	0.3%
	3.2	0.1	0.3	-	7.2
Implement all Traffic Mitigation Measures	4.0%	4.0%	4.0%	0.0%	4.0%
	42.5	2.4	4.3	-	96.5
TOTAL REDUCTIONS	65.1	17.5	30.9	-	122.2
	6.1%	29.2%	20.4%	0.0%	5.1%
TOTAL EMISSIONS (Non-Reduced Emissions-Total Reductions)	1,005.2	42.3	120.8	14.4	2,292.6
AQMD Thresholds	550.0	55.0	55.0	150.0	150.0
Project Significance (Yes or No)	YES	NO	YES	NO	YES

APPENDIX D

Noise Data

Introduction to Noise

Noise is usually defined as unwanted sound. It is an undesirable by-product of society's normal day-to-day activities. Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. The definition of noise as unwanted sound implies that it has an adverse effect on people and their environment.

Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). The human ear does not respond uniformly to sounds at all frequencies, being less sensitive to low and high frequencies than to medium frequencies which correspond with human speech. In response to this, the A-weighted noise level (or scale) has been developed. It corresponds better with people's subjective judgment of sound levels. This A-weighted sound level is called the "noise level" referenced in units of dB(A). Noise is measured on a logarithmic scale; a doubling of sound energy results in a three dB(A) increase in noise levels. However, changes in a community noise level of less than three dB(A) are not typically noticed by the human ear.¹ Changes from three to five dB(A) may be noticed by some individuals who are extremely sensitive to changes in noise. A 5.0 dB(A) increase is readily noticeable, while the human ear perceives a 10 dB(A) increase in sound level to be a doubling of sound.

Noise sources occur in two forms: (1) point sources, such as stationary equipment, a water reclamation plant, or individual motor vehicles; and (2) line sources, such as a roadway with a large number of point sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dB(A) for each doubling of distance from the source to the receptor at acoustically "hard" sites and 7.5 dB at acoustically "soft" sites.² For example, a 60 dB(A) noise level measured at 50 feet from a point source at an acoustically hard site would be 54 dB(A) at 100 feet from the source and 48 dB(A) at 200 feet from the source. Sound generated by a line source typically attenuates at a rate of 3.0 dB(A) and 4.5 dB(A) per doubling of distance from the source to the receptor for hard and soft sites, respectively.³ Sound levels can also be attenuated by man-made or natural barriers.

Solid walls, berms, or elevation differences typically reduce noise levels by 5.0 to 10.0 dB(A).⁴ Sound levels for a source may also be attenuated 3.0 to 5.0 dB(A) by a first row of houses and 1.5 dB(A) for each

¹ Highway Noise Fundamentals, (Springfield, Virginia: U. S. Department of Transportation, Federal Highway Administration, September 1980), p. 81.

² Highway Noise Fundamentals, (Springfield, Virginia: U. S. Department of Transportation, Federal Highway Administration, September 1980), p. 97. A "hard" or reflective site does not provide any excess ground-effect attenuation and is characteristic of asphalt, concrete, and very hard packed soils. An acoustically "soft" or absorptive site is characteristic of normal earth and moist ground with vegetation.

³ Highway Noise Fundamentals, (Springfield, Virginia: U. S. Department of Transportation, Federal Highway Administration, September 1980), p. 97.

⁴ Highway Noise Mitigation, (Springfield, Virginia: U. S. Department of Transportation, Federal Highway Administration, September 1980), p. 18.

additional row of houses.⁵ The noise attenuation provided by typical structures in California is provided in Table 1, Typical Outside to Inside Noise Attenuation for Structures in California.

Table 1
Typical Outside to Inside Noise Attenuation
for Structures in California

Building Type	Noise Reduction - dB(A)	
	Open Windows	Closed Windows
Residences	12	20
Schools	12	20
Churches	20	30
Hospitals/Convalescent Homes	17	25
Offices	17	25
Theaters	20	30
Hotels/Motels	17	25

Source: *Highway Noise Fundamentals*, (Springfield, Virginia: U. S. Department of Transportation, Federal Highway Administration, September 1980), p. 117.

When assessing community reaction to noise, there is an obvious need for a scale which averages varying noise exposure over time and quantifies the result in terms of a single number descriptor. Several scales have been developed which address community noise levels. Those that are applicable to this analysis are the Equivalent Noise Level (L_{eq}) and the Community Noise Equivalent Level (CNEL). L_{eq} is the average A-weighted sound level measured over a given time interval. L_{eq} can be measured over any time period, but is typically measured for 1-minute, 15-minute, 1-hour, or 24-hour periods. CNEL is another average A-weighted sound level measured over a 24-hour time period. However, this noise scale is adjusted to account for some individual's increased sensitivity to noise levels during the evening and nighttime hours. A CNEL noise measurement is obtained after adding five decibels to sound levels occurring during the evening from 7 P.M. to 10 P.M., and 10 decibels to sound levels occurring during the nighttime from 10 P.M. to 7 A.M. The five and 10 decibel penalties are applied to account for peoples' increased sensitivity during the evening and nighttime hours. For example, the logarithmic effect of these additions is that a 60 dB(A) 24-hour L_{eq} would result in a CNEL measurement of 66.7 dB(A).

⁵ T. M. Barry and J. A. Reagan, FHWA Highway Traffic Noise Prediction Model, (Washington D.C.: U.S. Department of Transportation, Federal Highway Administration, Office of Research, Office of Environmental Policy, December 1978), NTIS, FHWA-RD-77-108, p. 33.

NBC Studios
NOISE LEVEL CONTOURS

On-Site Noise Levels 1,800 Feet from Centerline of SR 134

ROADWAY NAME	Land Use	Lanes	Median Width	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Heavy Trucks	dB(A) CNEL
Segment											
ROADWAY											
SR-134 w/o Bob Hope Avenue		8	0	268,164	70	1800	0	0	6.4%	4.8%	70.0

(1) Distance to centerline of roadway.

Assumed 24-Hour Traffic Distribution:

	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

NBC Studios
NOISE LEVEL CONTOURS

On-Site Noise Levels 570 Feet from Centerline of SR 134

ROADWAY NAME	Land Use	Lanes	Median Width	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Heavy Trucks	dB(A) CNEL
Segment											
ROADWAY											
SR-134 w/o Bob Hope Avenue		8	0	268,164	70	570	0	0	6.4%	4.8%	75.0

(1) Distance to centerline of roadway.

Assumed 24-Hour Traffic Distribution:

	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

NBC Studios
NOISE LEVEL CONTOURS

On-Site Noise Levels at Edge of SR 134 Right of Way.

ROADWAY NAME	Land Use	Lanes	Median Width	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Heavy Trucks	dB(A) CNEL
Segment											
ROADWAY											
SR-134 w/o Bob Hope Avenue		8	0	268,164	70	50	0	0	6.4%	4.8%	88.2

(1) Distance to centerline of roadway.

Assumed 24-Hour Traffic Distribution:

	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

NBC Studios

EXISTING ON-SITE NOISE LEVEL CONTOURS - 1996 ADT Volumes

ROADWAY NAME	Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Center of Roadway				
							Medium Trucks	Heavy Trucks	CNEL at 75 Feet	DISTANCE TO CONTOUR			
										75 CNEL	70 CNEL	65 CNEL	60 CNEL
ROADWAY													
SR 134	w/o Bob Hope	8	0	198,716	70	0	6.4%	4.8%	83.3	495	1,539	4,783	14,862

(1) Distance to centerline of roadway.

"-" = contour is located within the roadway lanes or within 75 feet of the roadway centerline.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

NBC Studios

EXISTING ON-SITE NOISE LEVEL CONTOURS - Existing ADT Volumes

ROADWAY NAME	Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix		CNEL at 75 Feet	Distance from Center of Roadway				
							Medium Trucks	Heavy Trucks		DISTANCE TO CONTOUR				
										75 CNEL	70 CNEL	65 CNEL	60 CNEL	
ROADWAY														
California	SR-134 to Olive	2	0	1,700	28	0	6.4%	4.8%	50.4	-	-	-	-	
Olive	California to Alameda	4	0	19,900	30	0	6.4%	4.8%	62.0	-	-	-	119	
Bob Hope	SR-134 to Alameda	2	0	8,800	28	0	6.4%	4.8%	57.5	-	-	-	-	
Alameda	California to Buena Vista	4	0	20,100	25	0	6.4%	4.8%	59.8	-	-	-	-	

(1) Distance to centerline of roadway.

"-" = contour is located within the roadway lanes or within 75 feet of the roadway centerline.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

NBC Studios

NOISE LEVEL CONTOURS - Existing Off-Site ADT Volumes

ROADWAY NAME Segment	Land Use	Lanes	Median Width	ADT Volume	Free Flow Speed (mph)	Dist. from Center to Receptor	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Heavy Trucks Trucks		dB(A) CNEL
PASS AVENUE											
	Olive to Riverside Residential	4	0	23,206	30	42	0	0	6.4%	4.8%	65.5
	Alameda to Oak Residential	4	0	20,637	39	42	0	0	6.4%	4.8%	68.3
HOLLYWOOD WAY											
	Alameda to Verdugo Residential/School	4	0	26,885	39	42	0	0	6.4%	4.8%	69.5
CALIFORNIA STREET											
	Alameda to Verdugo Residential/School	2	0	327	28	30	0	0	6.4%	4.8%	47.3
BUENA VISTA STREET											
	Olive to Verdugo Hosp/School/Lib/Res'l	4	0	23,543	35	42	0	0	6.4%	4.8%	67.5
KEYSTONE STREET											
	Riverside to Oak Residential/School	2	0	1,733	14	30	0	0	6.4%	4.8%	45.9
SPARKS STREET											
	Riverside to Verdugo Residential	4	0	6,497	23	42	0	0	6.4%	4.8%	56.7
MAIN STREET											
	Riverside to Alameda Residential	2	0	701	14	30	0	0	6.4%	4.8%	41.9
VICTORY BLVD.											
	Verdugo to Olive Residential/School	4	0	21,460	35	42	0	0	6.4%	4.8%	67.1
VERDUGO AVENUE											
	Hollywood to Sparks School/Res'l/Library	4	0	15,880	27	42	0	0	6.4%	4.8%	62.6
OAK STREET											
	California to Buena Vista Residential/School	2	0	3,515	25	30	0	0	6.4%	4.8%	56.2
ALAMEDA AVENUE											
	Hollywood to California Residential	4	0	35,333	25	42	0	0	6.4%	4.8%	65.1
	Keystone to Mariposa Residential	4	0	21,396	39	42	0	0	6.4%	4.8%	68.5
	Main to Lake Residential	4	0	32,581	39	42	0	0	6.4%	4.8%	70.3
RIVERSIDE DRIVE											
	Keystone to Main Residential	4	0	8,912	30	42	0	0	6.4%	4.8%	61.4
	California to Bob Hope Residential	4	0	15,145	35	42	0	0	6.4%	4.8%	65.6

(1) Distance to centerline of roadway.

Assumed 24-Hour Traffic Distribution:

	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

NBC Studios

FUTURE (2008) ON-SITE NOISE LEVEL CONTOURS - 2008 ADT Volumes

ROADWAY NAME	Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix		Distance from Center of Roadway				
							Medium Trucks	Heavy Trucks	CNEL at 75 Feet	DISTANCE TO CONTOUR			
									75 CNEL	70 CNEL	65 CNEL	60 CNEL	
ROADWAY													
California	SR-134 to Olive	2	0	2,100	28	0	6.4%	4.8%	51.3	-	-	-	-
Olive	California to Alameda	4	0	24,500	30	0	6.4%	4.8%	62.9	-	-	-	146
Bob Hope	SR-134 to Alameda	2	0	11,000	28	0	6.4%	4.8%	58.5	-	-	-	-
Alameda	California to Buena Vista	4	0	25,000	25	0	6.4%	4.8%	60.8	-	-	-	89

(1) Distance to centerline of roadway.

"-" = contour is located within the roadway lanes or within 75 feet of the roadway centerline.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

NBC Studios

FUTURE (2008) ON-SITE NOISE LEVEL CONTOURS - 2008 ADT Volumes With Project

ROADWAY NAME	Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix		CNEL at 75 Feet	Distance from Center of Roadway			
							Medium Trucks	Heavy Trucks		DISTANCE TO CONTOUR			
ROADWAY													
SR 134	w/o Bob Hope	8	0	223,342	70	0	6.4%	4.8%	83.8	556	1,727	5,366	16,674

(1) Distance to centerline of roadway.

"-" = contour is located within the roadway lanes or within 75 feet of the roadway centerline.

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

NBC Studios

NOISE LEVEL CONTOURS - Future (2008) Off-Site ADT Volumes Without Project

ROADWAY NAME Segment	Land Use	Lanes	Median Width	ADT Volume	Free Flow Speed (mph)	Dist. from Center to Receptor	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Heavy Trucks Trucks		dB(A) CNEL
PASS AVENUE											
	Olive to Riverside Residential	4	0	24,866	30	42	0	0	6.4%	4.8%	65.8
	Alameda to Oak Residential	4	0	21,372	39	42	0	0	6.4%	4.8%	68.5
HOLLYWOOD WAY											
	Alameda to Verdugo Residential/School	4	0	29,555	39	42	0	0	6.4%	4.8%	69.9
CALIFORNIA STREET											
	Alameda to Verdugo Residential/School	2	0	572	28	30	0	0	6.4%	4.8%	49.7
BUENA VISTA STREET											
	Olive to Verdugo Hosp/School/Lib/Res'l	4	0	21,173	35	42	0	0	6.4%	4.8%	67.1
KEYSTONE STREET											
	Riverside to Oak Residential/School	2	0	1,733	14	30	0	0	6.4%	4.8%	45.9
SPARKS STREET											
	Riverside to Verdugo Residential	4	0	6,677	23	42	0	0	6.4%	4.8%	56.8
MAIN STREET											
	Riverside to Alameda Residential	2	0	831	14	30	0	0	6.4%	4.8%	42.7
VICTORY BLVD.											
	Verdugo to Olive Residential/School	4	0	23,185	35	42	0	0	6.4%	4.8%	67.5
VERDUGO AVENUE											
	Hollywood to Sparks School/Res'l/Library	4	0	16,285	27	42	0	0	6.4%	4.8%	62.7
OAK STREET											
	California to Buena Vista Residential/School	2	0	3,515	25	30	0	0	6.4%	4.8%	56.2
ALAMEDA AVENUE											
	Hollywood to California Residential	4	0	41,213	25	42	0	0	6.4%	4.8%	65.8
	Keystone to Mariposa Residential	4	0	22,956	39	42	0	0	6.4%	4.8%	68.8
	Main to Lake Residential	4	0	32,811	39	42	0	0	6.4%	4.8%	70.3
RIVERSIDE DRIVE											
	Keystone to Main Residential	4	0	9,347	30	42	0	0	6.4%	4.8%	61.6
	California to Bob Hope Residential	4	0	16,500	35	42	0	0	6.4%	4.8%	66.0

(1) Distance to centerline of roadway.

Assumed 24-Hour Traffic Distribution:

	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

NBC Studios

NOISE LEVEL CONTOURS - Future (2008) Off-Site ADT Volumes With Project

ROADWAY NAME Segment	Land Use	Lanes	Median Width	ADT Volume	Free Flow Speed (mph)	Dist. from Center to Receptor	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix		dB(A) CNEL
									Medium Trucks	Heavy Trucks	
PASS AVENUE											
	Olive to Riverside Residential	4	0	24,866	30	42	0	0	6.4%	4.8%	65.8
	Alameda to Oak Residential	4	0	21,519	39	42	0	0	6.4%	4.8%	68.5
HOLLYWOOD WAY											
	Alameda to Verdugo Residential/School	4	0	30,539	39	42	0	0	6.4%	4.8%	70.0
CALIFORNIA STREET											
	Alameda to Verdugo Residential/School	2	0	612	28	30	0	0	6.4%	4.8%	50.0
BUENA VISTA STREET											
	Olive to Verdugo Hosp/School/Lib/Res'l	4	0	27,591	35	42	0	0	6.4%	4.8%	68.2
KEYSTONE STREET											
	Riverside to Oak Residential/School	2	0	1,733	14	30	0	0	6.4%	4.8%	45.9
SPARKS STREET											
	Riverside to Verdugo Residential	4	0	6,711	23	42	0	0	6.4%	4.8%	56.8
MAIN STREET											
	Riverside to Alameda Residential	2	0	831	14	30	0	0	6.4%	4.8%	42.7
VICTORY BLVD.											
	Verdugo to Olive Residential/School	4	0	23,185	35	42	0	0	6.4%	4.8%	67.5
VERDUGO AVENUE											
	Hollywood to Sparks School/Res'l/Library	4	0	16,285	27	42	0	0	6.4%	4.8%	62.7
OAK STREET											
	California to Buena Vista Residential/School	2	0	3,515	25	30	0	0	6.4%	4.8%	56.2
ALAMEDA AVENUE											
	Hollywood to California Residential	4	0	42,771	25	42	0	0	6.4%	4.8%	65.9
	Keystone to Mariposa Residential	4	0	23,534	39	42	0	0	6.4%	4.8%	68.9
	Main to Lake Residential	4	0	33,140	39	42	0	0	6.4%	4.8%	70.4
RIVERSIDE DRIVE											
	Keystone to Main Residential	4	0	9,543	30	42	0	0	6.4%	4.8%	61.7
	California to Bob Hope Residential	4	0	18,774	35	42	0	0	6.4%	4.8%	66.6

(1) Distance to centerline of roadway.

Assumed 24-Hour Traffic Distribution:

	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

APPENDIX E
Related Projects List

Related Project List

<u>Project No.</u>	<u>Description</u>	<u>Jurisdiction</u>	<u>Location (Address)</u>
1.	79 Apartments	City of Los Angeles	Morrison Dr. & Klump Av.
2.	97 Apartments	City of Los Angeles	SW Corner of Moorpark St. & Vineland Ave.
3.	105 Apartments	City of Los Angeles	3908-3924 Laurel Canyon Bl.
4.	9,200 s.f. Retail; 8,700 s.f. Office; 31 Apartments	City of Los Angeles	Ventura Bl. & Blue Canyon Dr.
5.	68,000 s.f. Office	City of Los Angeles	Ventura Bl. & Laurel Canyon Bl.
6.	58,500 s.f. Office	City of Los Angeles	10380 Ventura Bl.
7.	90,000 s.f. Office	City of Los Angeles	11239 Ventura Bl. (Studio City Pl.)
8.	12,900 s.f. Office; 2,700 s.f. Retail	City of Los Angeles	11132 Ventura Bl.
9.	10,500 s.f. Mini-Mall	City of Los Angeles	Ventura Bl. & Lankershim Bl.
10.	10,000 s.f. Retail; 8,000 s.f. Office;	City of Los Angeles	3535 Cahuenga Bl. (Cahuenga Plaza)
11.	278,200 s.f. Office	City of Los Angeles	3330 Cahuenga Bl. (Taft Entertainment)
12.	116-Child (10,209 s.f.) Child Care Facility for MCA	City of Los Angeles	W/S Barham Bl. at Forest Lawn Dr.
13.	34,000 s.f. Office	City of Los Angeles	Chandler Av. & Tujunga Bl.
14.	400,000 s.f. Office	City of Los Angeles	5311 N. Lankershim Bl. (Weddington Plaza)
15.	27,500 s.f. Office	City of Los Angeles	Lankershim Bl. & Aqua Vista St.
16.	186-student Elementary School (private)	City of Los Angeles	10733 Chiquita St.
17.	30,000 s.f. Office	City of Los Angeles	Cahuenga Bl. & Barbara Ct.
18.	80,000 s.f. Office/Commercial; 226-unit Senior Housing;	City of Los Angeles	5447-5461 Hollywood Bl.
19.	192 Condominiums	City of Los Angeles	Mulholland Dr. & Hillpark Dr.

Project No.	Description	Jurisdiction	Location (Address)
20.	109 Apartments	City of Los Angeles	Highland Av. & Camrose Dr.
21.	22,000 s.f. Office	City of Los Angeles	3301 Barham Bl.
22.	26,000 s.f. Office; 7,000 s.f. Movie Theater	City of Los Angeles	7655 Sunset Bl.
23.	417,000 s.f. Retail; 400,000 s.f. Office; 400-room Hotel	City of Los Angeles	Hollywood Bl. & Highland Av.
24.	36,900 s.f. Food Court; 43,000 s.f. Retail; 38,000 s.f. Restaurant; 22,800 s.f. Movie Theater	City of Los Angeles	Sycamore Av.
25.	82 Apartments	City of Los Angeles	1750 N. Sycamore Av.
26.	15,500 s.f. Office; 15,500 s.f. Retail	City of Los Angeles	Sunset Bl. & Highland Av.
27.	10,200 s.f. Retail	City of Los Angeles	Cahuenga Bl. & Selma Av.
28.	14,000 s.f. Adult Entertainment	City of Los Angeles	1650 N. Ivar Av.
29.	13,000 s.f. Market; 14,000 s.f. Retail	City of Los Angeles	1900 N. Highland Av.
30.	350,000 s.f. Office; 350,000 s.f. Retail; 600 Apartments	City of Los Angeles	Hollywood Bl. & Highland Av.
31.	20-bed Youth Shelter (Phase I); 13,632 s.f Youth Center (Phase II); 124-unit Multi-Family Dwelling (Phase III) (Note: 3,320 s.f. Restaurant removed)	City of Los Angeles	5941 Hollywood Bl.
32.	Two Ready Mix Batch Plants	City of Los Angeles	8944 Bradley Av.
33.	250-unit Apartment	City of Los Angeles	NE Corner Glenoaks Bl. & Sheldon St.
34.	35,200 s.f. Light Industrial	City of Los Angeles	10919 Randall St.
35.	55 Single-Family Homes	City of Los Angeles	11272-11286 Wentworth St.
36.	North Hollywood Superior Court House	City of Los Angeles	Lankershim Bl. & Burbank Bl.
37.	34,000 s.f. Office	City of Los Angeles	N/S Chandler Bl. & E/O Camellia Dr.

<u>Project No.</u>	<u>Description</u>	<u>Jurisdiction</u>	<u>Location (Address)</u>
38.	27,701 s.f. Addition to 38,813 s.f. Lankershim Shopping Center	City of Los Angeles	8035-8055 Webb Av.
39.	47 Apartments (40,573 s.f.); 5,248 s.f. Strip Retail	City of Los Angeles	2461 Colorado Bl.
40.	11,160 s.f. Mini Mall Facility	City of Los Angeles	4500 Eagle Rock Bl.
41.	8-unit Apartment Building; 74 Condominium units	City of Los Angeles	2333 West Avenue 33
42.	17,380 s.f. Office and Super Store Outlet	City of Los Angeles	6450 Sunset Bl.
43.	21,450 s.f. Car Wash with Store	City of Los Angeles	6210 Sunset Bl.
44.	13,000 s.f. Ballroom and Catering Service	City of Los Angeles	5050 Hollywood Bl.
45.	36,180 s.f. Hughes Market	City of Los Angeles	2716 San Fernando Rd.
46.	84-unit Senior Citizen Housing	City of Los Angeles	3100 Fletcher Dr.
47.	26,515 s.f. Auto Retail/ Service Center; (22,109 s.f. Retail and 4,406 s.f. Service)	City of Los Angeles	3334 San Fernando Rd.
48.	280,410 s.f. Retail Center with Restaurant at "Franciscan" Site	City of Los Angeles	2901 Los Feliz Bl.
49.	Mixed Use, 3 to 4-stories (6,000 s.f. Transportation Service Center; 10,000 s.f. Adult Daycare Center; 139-unit Senior Housing with approx. 5,000 s.f. support areas).	City of Los Angeles	2461 Colorado Bl.
50.	Convert 131,380 s.f. Vacant Industrial Building to Church (2,400-seat Sanctuary) and Accessory Uses (Office, library, etc.), in 2 Phases	City of Los Angeles	4561 Colorado Bl. at San Fernando Rd.
51.	160,000 s.f. School/Church in 3-Phases (I=60K s.f., II = 50K s.f. and III = 50K sf.)	City of Los Angeles	2901 Los Feliz Bl.

Project No.	Description	Jurisdiction	Location (Address)
52.	60,000 s.f. Office Building	City of Los Angeles	NE Corner of Ventura Bl. & Laurel Grove
53.	45,324 s.f. full-service Supermarket	City of Los Angeles	95-0206 12400 Vanowen St.
54.	22,155 s.f. Auto Retail and Service Building (Note: previous use = 11,490 s.f. Auto Service establishment)	City of Los Angeles	6065 Lankershim Bl.
55.	22,100 s.f. Supermarket	City of Los Angeles	11633 Victory Bl.
56.	129,802 s.f. Home Depot (101,830 s.f. of store and 27,972 s.f. of outdoor garden center)	City of Los Angeles	11600 Sherman Wy.
57.	14,250 sf Supermarket (2-story)	City of Los Angeles	11357 Sherman Wy.
58.	Three 2-story Office Buildings (General Office = 8,200 s.f., Medical Office = 6,500 s.f., Total = 14,700 s.f.) in 3 phases	City of Los Angeles	9112 Sunland Bl.
59.	Extend hours from 15 to 24 hours; Increase Volume from 7K tons to 13K tons/day	City of Los Angeles	9227 Tujunga Av. (Bradley Landfill)
60.	486,126 s.f. Industrial Development	City of Los Angeles	92-0472 8946 Bradley Av.
61.	49 Condominiums	City of Los Angeles	10882-10896 Olinda St.
62.	Expansion of Existing Church (Phase I = 16,683 s.f.; Phase II = 10,695 s.f.; Phase III = 4,100 s.f.)	City of Los Angeles	11140 Saticoy St.
63.	63 Condominiums	City of Los Angeles	2753 Waverly Dr.
64.	8-lot Industrial Subdivision on 21 acres	City of Los Angeles	3370 San Fernando Rd.
65.	36,180 s.f. Hughes Supermarket	City of Los Angeles	2716 San Fernando Rd.
66.	177,071 s.f. Storage Warehouse	City of Los Angeles	2904-2924 Casitas Wy. & 2901-2934 Laclede Av.
67.	200,000 s.f. Office	City of Los Angeles	ABC TV Center

<u>Project No.</u>	<u>Description</u>	<u>Jurisdiction</u>	<u>Location (Address)</u>
68.	35,000 s.f. Light Industry and 71,000 s.f. Office	City of Los Angeles	S/O Arleta Av., N/O Roscoe Bl., E/O 170 Frwy.
69.	188-unit Senior Citizen Housing	City of Los Angeles	5401 Laurel Canyon Bl.
70.	140 Apartments	City of Los Angeles	13936-14100 Nordhoff St.
71.	20,562 s.f. Church Facility	City of Los Angeles	9351 Laurel Canyon Bl.
72.	91,400 s.f. (Retail Assumed).	City of Los Angeles	Wilton/De Longpre
73.	Mixed use Development of 980 Residential Units; 400,000 s.f. Office; and 300,000 s.f. Retail	City of Los Angeles	1411 N. Highland Av.
74.	50 Apartments	City of Los Angeles	NE Corner of Sunset Bl. & St. Andrews
75.	253,000 s.f. Warehouse	City of Los Angeles	W/O San Fernando Rd. & S/O Colorado Bl.
76.	145,000 s.f. Commercial Complex	City of Los Angeles	8000 Sunset Bl.
77.	17,000 s.f. Market	City of Los Angeles	5321 Hollywood Bl.
78.	Add 127 Students and 12 Faculty to Oakwood Jr./Sr. High School	City of Los Angeles	11600 Magnolia Bl.
79.	71,000 s.f. Shopping Center (39,000 s.f. Supermarket; 3,000 s.f. Restaurant; and 29,000 s.f. Retail Shops)	City of Los Angeles	SE Corner of Vineland & Magnolia Bl.
80.	Add 229,130 s.f. in 3-Phases (152,000 s.f. Stage Facilities; 38,118 s.f. Production - Support Office; 39,012 s.f. Dressing Rooms)	City of Los Angeles	4024 Radford Av.
81.	93 Apartment Units	City of Los Angeles	2600-2780 Riverside Dr.
82.	95,400 s.f. Office; 25,000 s.f. Retail	Burbank	SW Corner of Magnolia Bl. & Hollywood Wy.
83.	650,000 s.f. Office	Burbank	SE Corner of Empire Av. & Ontario St.
84.	200,000 s.f. Car Dealership	Burbank	Front St. S/O Burbank Bl.

Project No.	Description	Jurisdiction	Location (Address)
85.	270,000 s.f. Industrial Development	Burbank	N/O San Fernando Bl., E/o Ontario St.
86.	55,000 s.f. Retail; and 147-unit Retirement Community	Burbank	SW Corner of Magnolia Bl. & 3rd St.
87.	90,000 s.f. Retail	Burbank	SW Corner of Vanowen St. & Hollywood Wy.
88.	3,045,000 s.f. of Movie Studios Development	Burbank	SE Corner of Buena Vista St. & Alameda Av.
89.	Add 2,427,000 s.f. in 2-phases as part of Master Plan	Burbank	Olive Av. & Warner Bl.
90.	Add 1,063,620 sf in 2-phases as part of Master Plan	Burbank	Hollywood Wy. & Oak St.
91.	700,000 s.f. Media Office	Burbank	Olive Av. & California St.
92.	Burbank-Glendale-Pasadena Airport Expansion in 3-phases	Burbank	Hollywood Wy. & Thornton Av.
93.	950,000 s.f. Studio; 1,669,000 s.f. Entertainment; 2,000,000 s.f. Resort Hotel; and 1,233,000 s.f. Business Center Office/Hotel	Burbank	Universal City (MCA)
94.	46 seats Phase 1, equivalent 1,610 s.f.	County of Los Angeles	234 S. Brand
95.	365,000 s.f. Office; 40,000 s.f. Retail	Glendale	101 N. Brand
96.	10,000 s.f. Retail; 2 Screens, 700 Theater Seats	Glendale	Maryland Av., b/w Broadway & Wilson
97.	300,000 s.f. Office, Phase 1	Glendale	611 N. Brand
98.	185,000 s.f. Retail, 4 Screens, 2,000 Theater Seats	Glendale	100 Block S. Brand
99.	530,000 s.f. Office; 24,000 s.f. Restaurant	Glendale	600 Block N. Central
100.	312,750 s.f. Retail, 10-12 Screens, 3-4,000 Theater Seats	Glendale	S/O Lexington, Brand b/w Lexington & Colorado

<u>Project No.</u>	<u>Description</u>	<u>Jurisdiction</u>	<u>Location (Address)</u>
101.	35,500 s.f. Meeting Space; 80 Units Senior Housing; 125,000 s.f. Park Renovation; 50,000 s.f. Library Addition	Glendale	Existing Library, Harvard/Colorado/ Louise/Brand
102.	1,125 Parking Spaces	Glendale	Harvard and Maryland
103.	600 Parking Spaces	Glendale	Orange and California
104.	102,000 s.f. New Public Park; 75,000 s.f. Public Assembly; 20,000 s.f. Public Museum	Glendale	Brand to Orange, b/w Colorado & Broadway
105.	20,000 s.f. School Facilities; 196,000 s.f. New Public Park; 22,500 s.f. Community Facility	Glendale	Around corner from Pacific & Riverdale
106.	250 Rooms	Glendale	SO Lexington, Brand b/w Lexington and Colorado
107.	Add 174,000 s.f. Police Department	Glendale	NW Corner of Angeleno Av. & Third St.
108.	Add 285,000 s.f. Fire Department Remove 44,000 s.f. Housing units	Burbank	NE Corner of Olive Av. & Third St.
109.	Add 114,000 s.f. Housing units Remove 14,000 s.f. Industrial	Burbank	East side of San Fernando, b/w Verdugo Av. & Santa Anita Av.
110.	Add 243,000 s.f. Opportunity Site	Burbank	East side of First St., b/w Olive Av. & Angeleno Av.
111.	Add 762,000 s.f. Opportunity Site	Burbank	First St. & Magnolia Blvd.
112.	Add 289,000 s.f. Transportation Center	Burbank	Wesside of Front St., b/w Magnolia Bl. & Olive Av.
113.	Add 29,000 s.f. Industrial	Burbank	Front St. to Flower St., Olive Av. To Verdugo Av.
114.	Add 301,000 s.f. Opportunity Site Add 587,000 s.f. Housing Units	Burbank	NW Corner of San Fernando Rd. & Alameda Av.
115.	Add 189,000 s.f. Technical School	Burbank	SE Corner of Flower St. & Alameda Av.
116.	Add 175,000 s.f. Opportunity Site Remove 61,000 s.f. Housing units	Burbank	Alameda Av. & California St.
117.	Add 165,000 s.f. Medical Office Remove 3,000 s.f. Housing units	Burbank	Frederic St. to Buena Vista St., b/w Olive Av. & Alameda Av.

<u>Project No.</u>	<u>Description</u>	<u>Jurisdiction</u>	<u>Location (Address)</u>
118.	Add 650,000 s.f. Studio	Burbank	N. Ontario St., b/w Empire & Thorton
119.	Add 115,000 s.f. Industrial	Burbank	San Fernando Blvd. & Tulare Av.
120.	Add 2,107,000 s.f. Industrial	Burbank	Victory Pl. & Empire Av.
121.	Add 35,000 s.f. Opportunity Site	Burbank	Naomi & Glenoaks & Tulare
122.	108,000 s.f. Commercial	Burbank	SW Corner of Magnolia & Hollywood

APPENDIX H

Appendix H: Summary of Development

Summary of Development: Illustrative Concept

	Net	Gross (x 1.273)	Adjusted Gross (x 0.92)	Density (OEGSF) ¹
Existing Development	862,618	1,098,113	1,010,264	574,221
Proposed Demolition	(190,827)	(242,923)	(223,489)	(162,484)
New Baseline	671,791	855,190	786,775	411,736
Proposed New Construction	1,692,545	2,154,610	1,982,241	1,405,651
New Total	2,364,336	3,009,800	2,769,016	1,817,387
Net New Development	1,501,718	1,911,687	1,758,752	1,243,167
<hr/>				
			MDSP Allowed Density @ 1.1 FAR	2,136,038
			Transfer to Media Center South	(310,173)
				1,825,865
			Proposed New Total	1,817,387
			Residual Balance	8,477 OEGSF
				12,286 Gross (media office)

Source: NBC Planned Development Application, June 1996.

¹ OEGSF = Office Equivalent Gross Square Feet. The Burbank Media District Specific Plan regulates development based on OEGSF. This concept uses general office space as a basis for comparison of different media uses. Uses which generate less peak-hour traffic on a square foot basis than general office uses are adjusted based on the amount of peak-hour traffic generated to an equivalent amount of general office space.

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Buena Vista Street and Olive Avenue
 Analysis Condition: 1996 Existing
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 12.3
 Background 8-hour CO Concentration (ppm): 8.5
 Persistence Factor: 0.7
 Analysis Year: 1995

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway: Buena Vista Street	At Grade	4	20	20
East-West Roadway: Olive Avenue	At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	165	883	274		N	149	520	121	
W	<	v	>	E	W	<	v	>	E
329 ^				228	252 ^				93
685 >				948	834 >				615
176 v				441	136 v				156
	<	^	>			<	^	>	
S	273	643	324		S	78	887	208	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	2,740	N-S Road	2,022
E-W Road	2,900	E-W Road	2,064

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	2,740	*	17.90	+	100,000
E-W Road	5.4	3.8	1.6	*	2,900	*	17.90	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	2,022	*	17.90	+	100,000
E-W Road	5.4	3.8	1.6	*	2,064	*	17.90	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	16.2	15.1	11.2
100 Feet from Roadway Edge	15.1	14.3	10.5
300 Feet from Roadway Edge	13.7	13.3	9.5

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Buena Vista Street and Verdugo Avenue
 Analysis Condition: 1996 Existing
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 12.3
 Background 8-hour CO Concentration (ppm): 8.5
 Persistence Factor: 0.7
 Analysis Year: 1995

Roadway Type	No. of Lanes	Average Cruise Speed	
		A.M.	P.M.
North-South Roadway: Buena Vista Street	At Grade	4	20
East-West Roadway: Verdugo Avenue	At Grade	4	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	84	1,029	79		N	96	683	100	
W	<	v	>	E	W	<	v	>	E
57 ^				68	101 ^				104
280 >				275	403 >				413
138 v				43	86 v				26
	<	^	>			<	^	>	
S	23	411	22		S	107	980	30	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road 1,728
 E-W Road 857

N-S Road 2,064
 E-W Road 1,206

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	1,728	*	17.90	+	100,000
E-W Road	2.2	1.7	1.1	*	857	*	17.90	+	100,000
P.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	2,064	*	17.90	+	100,000
E-W Road	2.2	1.7	1.1	*	1,206	*	17.90	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	14.3	14.8	10.2
100 Feet from Roadway Edge	13.7	14.1	9.7
300 Feet from Roadway Edge	13.0	13.1	9.1

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Riverside Drive and Main Street
 Analysis Condition: 1996 Existing
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 12.3
 Background 8-hour CO Concentration (ppm): 8.5
 Persistence Factor: 0.7
 Analysis Year: 1995

North-South Roadway:	Main Street	Roadway Type	No. of Lanes	Average Cruise Speed	
				A.M.	P.M.
East-West Roadway:	Riverside Drive	At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	89	0	68		N	97	0	59	
W	<	v	>		W	<	v	>	
57 ^				45	0 ^				66
133 >				205	0 >				224
0 v				0	0 v				0
<	0	0	0		<	0	88	243	
S					S				

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	259	N-S Road	331
E-W Road	484	E-W Road	592

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	259	*	17.90	+	100,000
E-W Road	5.4	3.8	1.6	*	484	*	17.90	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	331	*	17.90	+	100,000
E-W Road	5.4	3.8	1.6	*	592	*	17.90	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	12.9	13.0	9.0
100 Feet from Roadway Edge	12.7	12.8	8.9
300 Feet from Roadway Edge	12.5	12.5	8.7

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Victory Boulevard and Olive Avenue
 Analysis Condition: 1996 Existing
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 12.3
 Background 8-hour CO Concentration (ppm): 8.5
 Persistence Factor: 0.7
 Analysis Year: 1995

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway: Victory Boulevard	At Grade	4	20	20
East-West Roadway: Olive Avenue	At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	162	905	145		N	90	730	156	
W	<	v	>	E	W	<	v	>	E
106 ^				120	123 ^				197
415 >				714	855 >				596
29 v				90	38 v				102
S	43	485	73		S	60	746	172	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	1,923	N-S Road	2,042
E-W Road	1,557	E-W Road	2,078

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	1,923	*	17.90	+	100,000
E-W Road	2.2	1.7	1.1	*	1,557	*	17.90	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	2,042	*	17.90	+	100,000
E-W Road	5.4	3.8	1.6	*	2,078	*	17.90	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	14.8	15.1	10.5
100 Feet from Roadway Edge	14.1	14.3	9.9
300 Feet from Roadway Edge	13.2	13.3	9.2

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Verdugo Avenue and Hollywood Way
 Analysis Condition: 1996 Existing
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 12.3
 Background 8-hour CO Concentration (ppm): 8.5
 Persistence Factor: 0.7
 Analysis Year: 1995

North-South Roadway:	Hollywood Way	Roadway Type	No. of Lanes	Average Cruise Speed	
				A.M.	P.M.
East-West Roadway:	Verdugo Avenue	At Grade	4	10	10
		At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	110	1,151	39		N	114	979	87	
W	<	v	>	E	W	<	v	>	E
254 ^				63	282 ^				83
279 >				247	453 >				412
70 v				148	52 v				104
	<	^	>			<	^	>	
S	29	533	43		S	83	1,119	107	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	2,150	N-S Road	2,664
E-W Road	989	E-W Road	1,396

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	2,150	*	34.80	÷	100,000
E-W Road	2.2	1.7	1.1	*	989	*	17.90	÷	100,000
P.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	2,664	*	34.80	÷	100,000
E-W Road	2.2	1.7	1.1	*	1,396	*	17.90	÷	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	16.7	17.9	12.4
100 Feet from Roadway Edge	15.4	16.2	11.3
300 Feet from Roadway Edge	13.7	14.1	9.7

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Sparks Street and Olive Avenue
 Analysis Condition: 1996 Existing
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 12.3
 Background 8-hour CO Concentration (ppm): 8.5
 Persistence Factor: 0.7
 Analysis Year: 1995

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway: Sparks Street	At Grade	4	20	20
East-West Roadway: Olive Avenue	At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	9	6	18		N	31	24	41	
W	<	v	>	E	W	<	v	>	E
131 ^				158	261 ^				233
454 >				822	1,144 >				835
76 v				107	79 v				111
S	15	9	5		S	50	30	24	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	331	N-S Road	620
E-W Road	1,564	E-W Road	2,400

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	331	*	17.90	+	100,000
E-W Road	5.4	3.8	1.6	*	1,564	*	17.90	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	620	*	17.90	+	100,000
E-W Road	5.4	3.8	1.6	*	2,400	*	17.90	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	13.9	14.9	10.3
100 Feet from Roadway Edge	13.5	14.1	9.8
300 Feet from Roadway Edge	12.8	13.1	9.1

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Oak Street and California Street
 Analysis Condition: 1996 Existing
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 12.3
 Background 8-hour CO Concentration (ppm): 8.5
 Persistence Factor: 0.7
 Analysis Year: 1995

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway: California Street	At Grade	2	20	20
East-West Roadway: Oak Street	At Grade	2	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak				P.M. Peak			
N	7	10	0	N	18	17	0
W	<	v	>	W	<	v	>
7 ^			0	16 ^			4
43 >			28	95 >			94
9 v			3	10 v			5
S	3	14	0	S	8	27	10

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	39	N-S Road	82
E-W Road	97	E-W Road	241

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	39	*	17.90	+	100,000
E-W Road	5.7	4.0	1.7	*	97	*	17.90	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	82	*	17.90	+	100,000
E-W Road	5.7	4.0	1.7	*	241	*	17.90	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	12.4	12.6	8.7
100 Feet from Roadway Edge	12.4	12.5	8.6
300 Feet from Roadway Edge	12.3	12.4	8.6

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Alameda Avenue and Keystone Street
 Analysis Condition: 1996 Existing
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 12.3
 Background 8-hour CO Concentration (ppm): 8.5
 Persistence Factor: 0.7
 Analysis Year: 1995

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway: Keystone Street	At Grade	2	20	20
East-West Roadway: Alameda Avenue	At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	21	26	25		N	20	18	23	
W	<	v	>	E	W	<	v	>	E
15 ^				24	27 ^				27
515 >				876	823 >				652
54 v				53	23 v				14
S	25	9	12		S	11	29	33	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	179	N-S Road	144
E-W Road	1,506	E-W Road	1,572

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	179	*	17.90	+	100,000
E-W Road	5.4	3.8	1.6	*	1,506	*	17.90	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	144	*	17.90	+	100,000
E-W Road	5.4	3.8	1.6	*	1,572	*	17.90	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	13.8	13.9	9.6
100 Feet from Roadway Edge	13.4	13.4	9.3
300 Feet from Roadway Edge	12.8	12.8	8.8

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Alameda Avenue and Lake Street
 Analysis Condition: 1996 Existing
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 12.3
 Background 8-hour CO Concentration (ppm): 8.5
 Persistence Factor: 0.7
 Analysis Year: 1995

North-South Roadway:	Lake Street	Roadway Type	No. of Lanes	Average Cruise Speed	
				A.M.	P.M.
East-West Roadway:	Alameda Avenue	At Grade	2	20	20
		At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	73	38	205		N	82	102	364	
W	<	v	>	E	W	<	v	>	E
46 ^				158	44 ^				180
835 >				1,259	1,518 >				892
42 v				40	54 v				54
	<	^	>			<	^	>	
S	58	57	58		S	34	47	34	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	577	N-S Road	819
E-W Road	2,555	E-W Road	3,042

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	577	*	17.90	+	100,000
E-W Road	5.4	3.8	1.6	*	2,555	*	17.90	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	819	*	17.90	+	100,000
E-W Road	5.4	3.8	1.6	*	3,042	*	17.90	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	15.0	15.6	10.8
100 Feet from Roadway Edge	14.2	14.6	10.1
300 Feet from Roadway Edge	13.1	13.3	9.2

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Alameda Avenue and Main Street
 Analysis Condition: 1996 Existing
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 12.3
 Background 8-hour CO Concentration (ppm): 8.5
 Persistence Factor: 0.7
 Analysis Year: 1995

North-South Roadway:	Main Street	Roadway Type	No. of Lanes	Average Cruise Speed	
				A.M.	P.M.
East-West Roadway:	Alameda Avenue	At Grade	4	20	20
		At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	120	94	56		N	184	86	114	
W	<	v	>	E	W	<	v	>	E
78 ^				104	167 ^				84
410 >				850	868 >				580
82 v				97	90 v				40
	<	^	>			<	^	>	
S	74	49	45		S	120	76	110	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	501	N-S Road	711
E-W Road	1,614	E-W Road	2,009

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	501	*	17.90	÷	100,000
E-W Road	5.4	3.8	1.6	*	1,614	*	17.90	÷	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	711	*	17.90	÷	100,000
E-W Road	5.4	3.8	1.6	*	2,009	*	17.90	÷	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	14.1	14.5	10.1
100 Feet from Roadway Edge	13.6	13.9	9.6
300 Feet from Roadway Edge	12.9	13.0	9.0

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Riverside Drive and Keystone Street
 Analysis Condition: 1996 Existing
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 12.3
 Background 8-hour CO Concentration (ppm): 8.5
 Persistence Factor: 0.7
 Analysis Year: 1995

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway: Keystone Street	At Grade	2	20	20
East-West Roadway: Riverside Drive	At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	115	0	12		N	44	1	12	
W	<	v	>	E	W	<	v	>	E
28 ^				10	60 ^				13
244 >				342	379 >				258
1 v				0	4 v				1
S	1	0	1		S	5	1	0	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	165	N-S Road	131
E-W Road	731	E-W Road	750

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	165	*	17.90	+	100,000
E-W Road	5.4	3.8	1.6	*	731	*	17.90	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	131	*	17.90	+	100,000
E-W Road	5.4	3.8	1.6	*	750	*	17.90	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	13.1	13.1	9.0
100 Feet from Roadway Edge	12.8	12.9	8.9
300 Feet from Roadway Edge	12.5	12.5	8.7

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

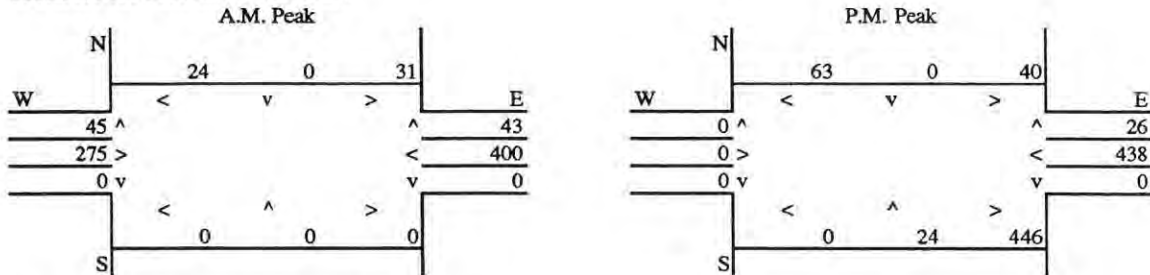
Project Title: NBC Studios
 Intersection: Riverside Drive and California Street
 Analysis Condition: 1996 Existing
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 12.3
 Background 8-hour CO Concentration (ppm): 8.5
 Persistence Factor: 0.7
 Analysis Year: 1995

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway: California Street	At Grade	2	20	20
East-West Roadway: Riverside Drive	At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES



Representative Traffic Volumes (Vehicles per Hour)

N-S Road	143	N-S Road	470
E-W Road	749	E-W Road	950

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	143	*	17.90	+	100,000
E-W Road	5.4	3.8	1.6	*	749	*	17.90	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	470	*	17.90	+	100,000
E-W Road	5.4	3.8	1.6	*	950	*	17.90	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	13.1	13.4	9.3
100 Feet from Roadway Edge	12.9	13.1	9.1
300 Feet from Roadway Edge	12.5	12.7	8.7

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

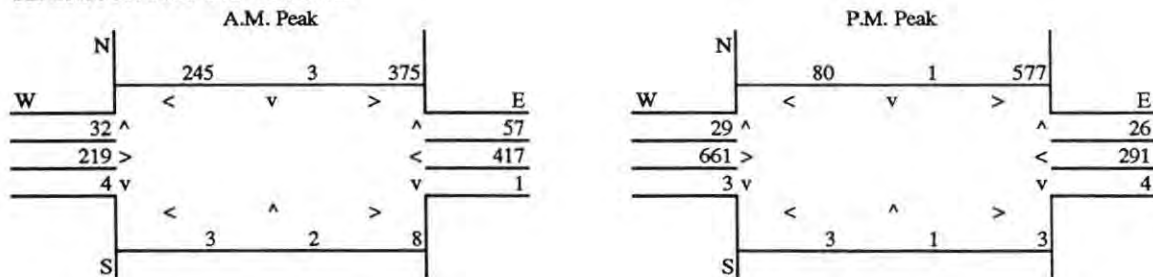
Project Title: NBC Studios
 Intersection: Riverside Drive and Bob Hope Drive
 Analysis Condition: 1996 Existing
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 12.3
 Background 8-hour CO Concentration (ppm): 8.5
 Persistence Factor: 0.7
 Analysis Year: 1995

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway:	Bob Hope Drive	At Grade	20	20
East-West Roadway:	Riverside Drive	At Grade	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES



Representative Traffic Volumes (Vehicles per Hour)

N-S Road 714
 E-W Road 1,077

N-S Road 714
 E-W Road 1,562

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	714	*	17.90	+	100,000
E-W Road	5.4	3.8	1.6	*	1,077	*	17.90	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	714	*	17.90	+	100,000
E-W Road	5.4	3.8	1.6	*	1,562	*	17.90	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	13.6	14.1	9.8
100 Feet from Roadway Edge	13.2	13.6	9.4
300 Feet from Roadway Edge	12.7	12.9	8.9

Project Title:	NBC Studios
Intersection:	Alameda Avenue and Buena Vista Street
Analysis Condition:	1996 Existing
Nearest Air Monitoring Station measuring CO:	Burbank
Background 1-hour CO Concentration (ppm):	12.3
Background 8-hour CO Concentration (ppm):	8.5
Persistence Factor:	0.7
Analysis Year:	1995

		Roadway Type	No. of Lanes	Average Cruise Speed	
				A.M.	P.M.
North-South Roadway:	Buena Vista Street	At Grade	4	20	20
East-West Roadway:	Alameda Avenue	At Grade	4	20	20

	Average Speed (miles per hour)									
Year	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

A.M. Peak

Direction	Flow 1	Flow 2	Flow 3
N to S	220	500	160
S to N	402	763	122
W to E	303	759	132
E to W	243	607	135

P.M. Peak

Direction	Flow 1	Flow 2	Flow 3
N to S	142	877	100
S to N	122	548	72
W to E	166	521	86
E to W	284	775	143

N-S Road	2,189	N-S Road	2,117
E-W Road	2,423	E-W Road	1,895

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	2,189	*	17.90	÷	100,000
E-W Road	5.4	3.8	1.6	*	2,423	*	17.90	÷	100,000
P.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	2,117	*	17.90	÷	100,000
E-W Road	2.2	1.7	1.1	*	1,895	*	17.90	÷	100,000

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	15.5	15.1	10.7
100 Feet from Roadway Edge	14.6	14.3	10.1
300 Feet from Roadway Edge	13.4	13.3	9.3

Construction Emissions

Construction Exhaust Emissions - Methodology and Project Emissions -

SCAQMD's methodology presented in its CEQA Air Quality Handbook was used for this analysis for calculating emissions generated by all types of vehicles and equipment associated with construction activities. The methodologies can be classified into two categories: a detailed methodology and a generalized methodology. The detailed method of analysis applies to those situations where highly detailed and specific information is available regarding all aspects of the proposed construction activity, such as the daily number of construction employees working on the site, the number of trucks hauling materials to and from the site on a daily basis, and the specific number, types, and operating time of construction equipment used on a daily basis. Detailed methodology regarding emissions generated during site preparation is typically applicable to subdivisions for which grading and other infrastructure plans have been prepared. Based on this level of detail, construction emissions can be more precisely determined. Recognizing that this level of information is often unavailable to complete this programmatic level of analysis, the SCAQMD provides a generalized methodology that can be applied when detailed information is unavailable. This generalized methodology, identified in Table A9-3-H of the SCAQMD's CEQA Air Quality Handbook, calculates the total amount of emissions generated during a project's construction stage and includes all typical emissions, such as stationary and mobile construction equipment, worker travel exhaust, and truck and material transport exhaust. This methodology is appropriate for this programmatic analysis given the unknown and speculative factors regarding the construction of the proposed project.

Table AQ-1
EMISSIONS FROM HEAVY-DUTY ENGINES AND CONSTRUCTION ENERGY CONSUMPTION
(SCAQMD CEQA Air Quality Handbook Table A9-3)

Project Name: NBC Studios

% Diesel Equipment: 80.0%

% Gasoline Equipment: 20.0%

Days of Construction Activity: 2400 days (300 days per year for 8 years)

Land Use Type	Code	Square Feet (OECSF)	Million BTUs	Total Construction Phase Emissions in Tons				
				CO	VOC	NO _x	SO _x	PM ₁₀
Office	5	1,243,166	299,654.0	1,114.7	65.9	431.8	28.3	15.2
TOTAL EMISSIONS				1,114.7	65.9	431.8	28.3	15.2
DAILY TOTALS (Pounds per Day)				928.9	54.9	359.8	23.6	12.7
QUARTERLY TOTALS (Tons per Quarter)				34.83	2.06	13.49	0.89	0.48

Thermal Energy Consumption per Square Foot

Land Use Type	Code	Thermal Energy Consumption in BTUs/SF		
		On-Site Activity	Material Transport	Total
Religious Buildings	1	158,760	26,430	185,190
Hospital Buildings	2	216,720	36,079	252,799
Stores and Restaurants	3	118,440	19,717	138,157
Hotels and Motels	4	154,980	25,800	180,780
Office Buildings	5	206,640	34,401	241,041
Educational Buildings	6	175,140	29,157	204,297
Dormitories	7	180,180	29,996	210,176
High-Rise Apartments	8	93,240	15,522	108,762
Garden Apartments	9	81,900	13,634	95,534
Single Family Housing	10	88,200	14,683	102,883
Two- to Four-Family Housing	11	79,380	13,215	92,595
Farm Residential Buildings	12	70,560	11,747	82,307
Farm Site Service Stations(1)	13	18,900	3,146	22,046
Other Non-Farm Buildings	14	182,700	30,415	213,115
Car Garages and Serv Stations	15	97,020	16,151	113,171
Warehouses	16	70,560	11,747	82,307
Industrial Buildings	17	122,220	20,347	142,567

Emission Factors for Each Criteria Pollutant from Energy Consumption

Emission Factors	Emission Factors in Pounds per Million BTUs				
	CO	VOC	NO _x	SO _x	PM ₁₀
Diesel Fuel	0.735	0.23	3.38	0.225	0.12
Gasoline	34.26	1.28	0.89	0.046	0.028

EVAPORATIVE EMISSIONS FROM ARCHITECTURAL COATINGS AND BUILDING MATERIAL

(SCAQMD CEQA Air Quality Handbook Table 9-13)

Project Name: NBC Studios

Days of Painting Activity: 2400 days (300 days per year for 8 years)

Land Use Type	Code	No. of Units	Square Feet (OEGSF)	Surface Area	Rule 1113 (lbs/gal)	VOC (lbs/1000 SF)	Emissions in Tons VOC
Estate Residential (1)	3			0.0	2.08	18.50	0.0
Low Density Residential	3			0.0	2.08	18.50	0.0
Low-Medium Residential	3			0.0	2.08	18.50	0.0
Medium Residential	3			0.0	2.08	18.50	0.0
High Density Residential	3			0.0	2.08	18.50	0.0
Business Park	4			0.0	2.08	18.50	0.0
Commercial	4			0.0	2.08	18.50	0.0
Office	4	1	1,243,166.0	2,486,332.0	2.08	18.50	402.5
Library	4			0.0	2.08	18.50	0.0
Schools	4			0.0	2.08	18.50	0.0
Golf Course	4			0.0	2.08	18.50	0.0
Utilities	4			0.0	2.08	18.50	0.0
TOTAL EMISSIONS							402.5
DAILY TOTALS (Pounds per Day)							335.4
QUARTERLY TOTALS (Tons per Quarter)							12.58

Estimating Surface Area to be Coated

Land Uses	Code	
Residential Uses		
Single Family Units	1	20,658.9 square feet of coating surface per unit.
Multi-Family Units	2	7,230.6 square feet of coating surface per unit.
Misc. Residential	3	2.7 square feet of coating surface for each sq. ft. of floor space.
Non-residential Uses	4	2.0 square feet of coating surface for each sq. ft. of floor space.

Operational Emissions

Table 1
SUMMARY OF ESTIMATED DAILY OPERATION-RELATED EMISSIONS

Project Name: NBC

[illegible]

Table 2
EMISSIONS FROM ON-ROAD VEHICLE TRAVEL
 (SCAQMD CEQA Air Quality Handbook Tables A9-5 & A9-9)

Project Name: NBC

Analysis Year: 2008

Project Location:

Orange County	
Los Angeles County	X
Riverside County	
San Bernardino Co	

EMFAC7 Model: EMFAC7F

Analysis Temperatures:

CO	60
VOC	85
NO _x	75

TOG to VOC Factors:

CAT	0.8515
NCAT	0.9240
Diesel	0.9573

Ref No.	Land Use	Res/ Non-Res	Units/ 1000 SF	ADT Rates	NOV Rates	Trips per 1000 SF	ADT	% Pass-By	% Diverted	% Internal	External Trips	NOV	% Work Trips	% Std Cold	% Std Hot	% Truck Trips
162	Studio OE	N	1243.17	9.76	4.88	1000 SF	12,138	0%	0%	0%	12,138	6,069	35.0%	70.0%	30.0%	1.8%

Trip Types	Residential			Non-Residential		
	Home to Work	Home to Shop	Home to Other	Work	Non-Work	Pass-By
Trip Length (miles)	11.61	5.92	7.45	10.70	6.24	0.05
Percent Trip	13.3%	21.6%	65.1%			0.40

Time of Day	A.M. Peak	Off-Peak	P.M. Peak
Traffic Speeds	21.3	33.1	18.9

Roadway Types	Paved (without cleaning)	Paved (with cleaning)	Unpaved
Project Traffic Travel		X	

Vehicle Fleetmix	% Type	Catalyst	Non-Catalyst	Diesel
Passenger Vehicles				
Automobiles	77.53%	99.86%	0.08%	0.06%
Light-Duty Trucks	21.80%	99.95%	0.00%	0.05%
Motorcycles	0.56%	-	100.00%	-
Buses	0.11%	-	-	100.00%
Trucks				
Medium-Duty Trucks	57.14%	99.95%	0.00%	-
Heavy-Duty Gas Trucks	10.71%	87.37%	12.63%	-
Heavy-Duty Diesel Trucks	32.14%	-	-	100.00%

Project Vehicular Emissions	Emissions in Pounds per Day					Vehicle Miles
	CO	VOC	NO _x	SO _x	PM ₁₀	
Studio OE	1,062.6	59.1	107.3	10.8	2,413.6	94,663
TOTALS	1,062.6	59.1	107.3	10.8	2,413.6	94,663

Table 3
EMISSIONS FROM ELECTRICITY AND NATURAL GAS CONSUMPTION
 (SCAQMD CEQA Air Quality Handbook Tables A9-11 and A9-12)

Project Name: NBC

Service Area: SCE

Land Use Type	Code	Units/ SF	kWh/Year	cf/Month	Electricity Emissions in Pounds per Day					Natural Gas Emissions in Pounds per Day				
					CO	VOC	NO _x	SO _x	PM ₁₀	CO	VOC	NO _x	SO _x	PM ₁₀
Studio OE	11	1,243,166	10,939,861	2,486,332	6.0	0.3	34.5	3.6	1.2	1.7	0.4	9.9	0.0	0.0
TOTALS			10,939,861	2,486,332	6.0	0.3	34.5	3.6	1.2	1.7	0.4	9.9	0.0	0.0

Conversion Factors

Land Use Type	Code	Electricity Demand Conversion Factors			Natural Gas Consumption Conversion Factors	
		Electricity Unit Type	SCE	DWP		Usage Factor
Residential						
Single Family	1	Kilowatt-hour/Unit/Year	6,081.0	5,172.0	Cubic Feet/Unit/Month	6,665.0
Multi-Family (<5)	2	Kilowatt-hour/Unit/Year	6,081.0	5,172.0	Cubic Feet/Unit/Month	4,105.0
Multi-Family (5+)	3	Kilowatt-hour/Unit/Year	6,081.0	5,172.0	Cubic Feet/Unit/Month	3,918.0
Food Store	4	Kilowatt-hour/Square Feet/Year	51.4	55.2	Cubic Feet/Square Foot/Month	2.9
Restaurant	5	Kilowatt-hour/Square Feet/Year	47.3	47.6	Cubic Feet/Square Foot/Month	2.9
Hospitals	6	Kilowatt-hour/Square Feet/Year	17.9	25.5	Cubic Feet/Square Foot/Month	4.8
Retail	7	Kilowatt-hour/Square Feet/Year	11.8	15.3	Cubic Feet/Square Foot/Month	2.9
College/University	8	Kilowatt-hour/Square Feet/Year	11.6	11.5	Cubic Feet/Square Foot/Month	2.0
High School	9	Kilowatt-hour/Square Feet/Year	8.8	12.2	Cubic Feet/Square Foot/Month	2.0
Elementary School	10	Kilowatt-hour/Square Feet/Year	6.3	5.5	Cubic Feet/Square Foot/Month	2.0
Office	11	Kilowatt-hour/Square Feet/Year	8.8	17.1	Cubic Feet/Square Foot/Month	2.0
Hotel/Motel	12	Kilowatt-hour/Square Feet/Year	6.8	13.1	Cubic Feet/Square Foot/Month	4.8
Warehouse	13	Kilowatt-hour/Square Feet/Year	3.4	5.3	Cubic Feet/Square Foot/Month	2.0
Miscellaneous	14	Kilowatt-hour/Square Feet/Year	8.8	12.2	Cubic Feet/Customer/Month	241,611.0

Emission Factors for Each Criteria Pollutant from Consumption of Electricity and Natural Gas

Emission Factors	Electricity Emissions Factors (pounds per megawatt-hour)					Natural Gas Emission Factors (pounds per million cubic feet)				
	CO	VOC	NO _x	SO _x	PM ₁₀	CO	VOC	NO _x	SO _x	PM ₁₀
Residential Uses	0.20	0.01	1.15	0.12	0.04	20.0	5.3	80.0	0.0	0.2
Nonresidential Uses	0.20	0.01	1.15	0.12	0.04	20.0	5.3	120.0	0.0	0.2

Future (2008) Carbon Monoxide (CO) Concentrations With Project

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

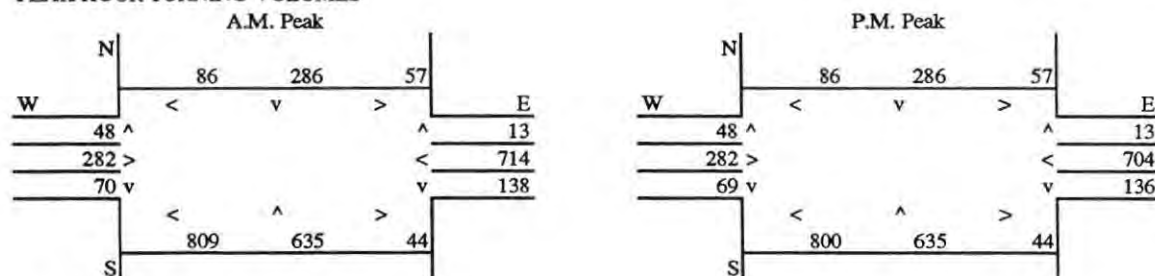
Project Title: NBC Studios
 Intersection: Pass Avenue and Riverside Drive
 Analysis Condition: Future (2008) With Project
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 7.8
 Background 8-hour CO Concentration (ppm): 5.4
 Persistence Factor: 0.7
 Analysis Year: 2010

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway:	Pass Avenue	At Grade	4	20
East-West Roadway:	Riverside Drive	At Grade	4	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES



Representative Traffic Volumes (Vehicles per Hour)

N-S Road	1,982	N-S Road	1,970
E-W Road	2,009	E-W Road	1,989

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	1,982	*	5.56	+	100,000
E-W Road	5.4	3.8	1.6	*	2,009	*	5.56	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	1,970	*	5.56	+	100,000
E-W Road	5.4	3.8	1.6	*	1,989	*	5.56	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	8.6	8.6	6.0
100 Feet from Roadway Edge	8.4	8.4	5.8
300 Feet from Roadway Edge	8.1	8.1	5.6

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Pass Avenue and Olive Avenue
 Analysis Condition: Future (2008) With Project
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 7.8
 Background 8-hour CO Concentration (ppm): 5.4
 Persistence Factor: 0.7
 Analysis Year: 2010

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway:	Pass Avenue	At Grade	4	20
East-West Roadway:	Olive Avenue	At Grade	4	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	0	874	24		N	0	680	29	
W	<	v	>	E	W	<	v	>	E
0 ^				8	0 ^				63
0 >				0	0 >				0
0 v				1,880	0 v				1,710
	<	^	>			<	^	>	
S	0	324	1,664		S	0	598	1,929	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	4,742	N-S Road	4,917
E-W Road	3,576	E-W Road	3,731

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	4,742	*	5.56	+	100,000
E-W Road	2.2	1.7	1.1	*	3,576	*	5.56	+	100,000
P.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	4,917	*	5.56	+	100,000
E-W Road	2.2	1.7	1.1	*	3,731	*	5.56	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	9.7	9.7	6.8
100 Feet from Roadway Edge	9.1	9.2	6.4
300 Feet from Roadway Edge	8.4	8.5	5.9

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Pass Avenue and Alameda Avenue
 Analysis Condition: Future (2008) With Project
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 7.8
 Background 8-hour CO Concentration (ppm): 5.4
 Persistence Factor: 0.7
 Analysis Year: 2010

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway: Pass Avenue	At Grade	4	20	20
East-West Roadway: Alameda Avenue	At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	171	1,310	666	E	N	229	747	378	E
W	<	v	>	85	W	<	v	>	264
117 ^				394	138 ^				845
764 >				62	739 >				57
21 v					28 v				
	<	98	149	96		<	33	537	155
S					S				

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	2,498	N-S Road	2,293
E-W Road	2,067	E-W Road	2,438

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	2,498	*	5.56	+	100,000
E-W Road	2.2	1.7	1.1	*	2,067	*	5.56	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	2,293	*	5.56	+	100,000
E-W Road	5.4	3.8	1.6	*	2,438	*	5.56	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	8.8	8.8	6.1
100 Feet from Roadway Edge	8.5	8.5	5.9
300 Feet from Roadway Edge	8.1	8.2	5.6

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Hollywood Way and Alameda Avenue
 Analysis Condition: Future (2008) With Project
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 7.8
 Background 8-hour CO Concentration (ppm): 5.4
 Persistence Factor: 0.7
 Analysis Year: 2010

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway: Hollywood Way	At Grade	4	10	10
East-West Roadway: Alameda Avenue	At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	526	1,208	196		N	383	820	109	
W	<	v	>	E	W	<	v	>	E
82 ^				372	154 ^				533
727 >				1,221	802 >				1,446
105 v				407	133 v				137
	<	^	>			<	^	>	
S	194	303	17		S	702	949	31	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	2,687	N-S Road	2,948
E-W Road	2,940	E-W Road	3,620

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	2,687	*	10.81	+	100,000
E-W Road	5.4	3.8	1.6	*	2,940	*	5.56	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	2,948	*	10.81	+	100,000
E-W Road	5.4	3.8	1.6	*	3,620	*	5.56	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	9.3	9.6	6.7
100 Feet from Roadway Edge	8.9	9.1	6.3
300 Feet from Roadway Edge	8.4	8.5	5.9

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Hollywood Way and Verdugo Avenue
 Analysis Condition: Future (2008) With Project
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 7.8
 Background 8-hour CO Concentration (ppm): 5.4
 Persistence Factor: 0.7
 Analysis Year: 2010

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway:	Hollywood Way	At Grade	4	10
East-West Roadway:	Verdugo Avenue	At Grade	4	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	110	1,529	39	E	N	137	1,137	118	E
W	<	v	>	W	<	v	>	W	E
254 ^				88	319 ^			118	
282 >				247	453 >			412	
87 v				171	53 v			105	
S	29	644	46	S	87	1,417	125	S	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	2,664	N-S Road	3,246
E-W Road	1,009	E-W Road	1,461

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	2,664	*	10.81	+	100,000
E-W Road	2.2	1.7	1.1	*	1,009	*	5.56	+	100,000
P.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	3,246	*	10.81	+	100,000
E-W Road	2.2	1.7	1.1	*	1,461	*	5.56	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	9.5	9.9	6.9
100 Feet from Roadway Edge	9.0	9.3	6.4
300 Feet from Roadway Edge	8.3	8.5	5.9

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

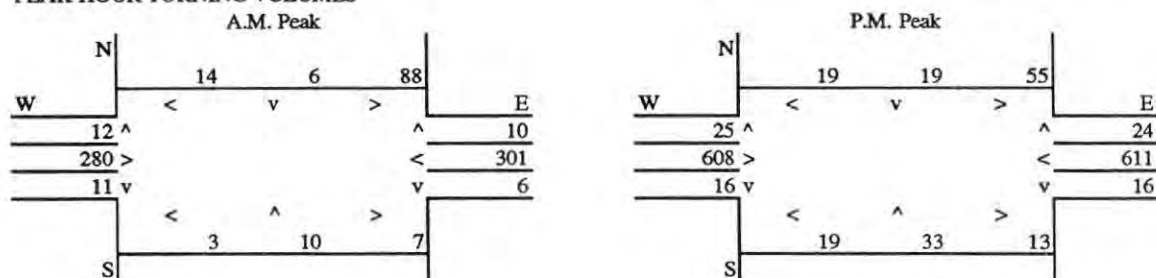
Project Title: NBC Studios
 Intersection: California Street and Verdugo Avenue
 Analysis Condition: Future (2008) With Project
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 7.8
 Background 8-hour CO Concentration (ppm): 5.4
 Persistence Factor: 0.7
 Analysis Year: 2010

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway: California Street	At Grade	2	20	20
East-West Roadway: Verdugo Avenue	At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES



Representative Traffic Volumes (Vehicles per Hour)

N-S Road	140	N-S Road	175
E-W Road	692	E-W Road	1,327

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	140	*	5.56	÷	100,000
E-W Road	5.4	3.8	1.6	*	692	*	5.56	÷	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	175	*	5.56	÷	100,000
E-W Road	5.4	3.8	1.6	*	1,327	*	5.56	÷	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	8.0	8.2	5.7
100 Feet from Roadway Edge	8.0	8.1	5.6
300 Feet from Roadway Edge	7.9	7.9	5.5

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Buena Vista Street and Olive Avenue
 Analysis Condition: Future (2008) With Project
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 7.8
 Background 8-hour CO Concentration (ppm): 5.4
 Persistence Factor: 0.7
 Analysis Year: 2010

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway: Buena Vista Street	At Grade	4	20	20
East-West Roadway: Olive Avenue	At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak				P.M. Peak			
N	523	921	133	N	223	642	121
W	<	v	>	W	<	v	>
157 ^			115	345 ^			93
469 >			1,080	1,090 >			679
43 v			269	136 v			276
<	76	541	249	<	78	1,000	374
S				S			

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	2,390	N-S Road	2,506
E-W Road	2,348	E-W Road	2,633

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	2,390	*	5.56	+	100,000
E-W Road	2.2	1.7	1.1	*	2,348	*	5.56	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	2,506	*	5.56	+	100,000
E-W Road	5.4	3.8	1.6	*	2,633	*	5.56	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	8.8	8.9	6.2
100 Feet from Roadway Edge	8.5	8.6	6.0
300 Feet from Roadway Edge	8.2	8.2	5.7

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Buena Vista Street and Verdugo Avenue
 Analysis Condition: Future (2008) With Project
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 7.8
 Background 8-hour CO Concentration (ppm): 5.4
 Persistence Factor: 0.7
 Analysis Year: 2010

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway:	Buena Vista Street	At Grade	4	20
East-West Roadway:	Verdugo Avenue	At Grade	4	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	84	1,228	91		N	98	794	119	
W	85 ^	< v	>	E	W	119 ^	< v	>	E
	320 >			94		404 >			104
	146 v			314		118 v			414
				44					37
S	26	532	34		S	114	1,169	37	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	2,114	N-S Road	2,403
E-W Road	975	E-W Road	1,267

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	2,114	*	5.56	÷	100,000
E-W Road	2.2	1.7	1.1	*	975	*	5.56	÷	100,000
P.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	2,403	*	5.56	÷	100,000
E-W Road	2.2	1.7	1.1	*	1,267	*	5.56	÷	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	8.6	8.7	6.0
100 Feet from Roadway Edge	8.3	8.4	5.8
300 Feet from Roadway Edge	8.0	8.1	5.6

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
Intersection: Riverside Drive and Main Street
Analysis Condition: Future (2008) With Project
Nearest Air Monitoring Station measuring CO: Burbank
Background 1-hour CO Concentration (ppm): 7.8
Background 8-hour CO Concentration (ppm): 5.4
Persistence Factor: 0.7
Analysis Year: 2010

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway:	Main Street	At Grade	4	20
East-West Roadway:	Riverside Drive	At Grade	4	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	102	0	80		N	99	0	59	
W	<	v	>	E	W	<	v	>	E
0 ^				45	0 ^				66
0 >				311	0 >				233
0 v				0	0 v				0
S	0	57	179		S	0	90	294	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	284	N-S Road	384
E-W Road	615	E-W Road	652

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	284	*	5.56	÷	100,000
E-W Road	5.4	3.8	1.6	*	615	*	5.56	÷	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	384	*	5.56	÷	100,000
E-W Road	5.4	3.8	1.6	*	652	*	5.56	÷	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	8.0	8.0	5.6
100 Feet from Roadway Edge	8.0	8.0	5.5
300 Feet from Roadway Edge	7.9	7.9	5.5

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Main Street and Alameda Avenue
 Analysis Condition: Future (2008) Wotj [rpkect
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 7.8
 Background 8-hour CO Concentration (ppm): 5.4
 Persistence Factor: 0.7
 Analysis Year: 2010

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway:	Main Street	At Grade	4	20
East-West Roadway:	Alameda Avenue	At Grade	4	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	129	107	56		N	186	86	114	
W	<	v	>	E	W	<	v	>	E
79 ^				105	178 ^				100
413 >				1,022	994 >				625
82 v				101	90 v				40
	<	^	>			<	^	>	
S	74	49	45		S	120	76	110	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	525	N-S Road	740
E-W Road	1,799	E-W Road	2,193

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	525	*	5.56	+	100,000
E-W Road	5.4	3.8	1.6	*	1,799	*	5.56	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	740	*	5.56	+	100,000
E-W Road	5.4	3.8	1.6	*	2,193	*	5.56	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	8.4	8.5	5.9
100 Feet from Roadway Edge	8.2	8.3	5.8
300 Feet from Roadway Edge	8.0	8.0	5.6

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Victory Boulevard and Olive Avenue
 Analysis Condition: Future (2008) With Project
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 7.8
 Background 8-hour CO Concentration (ppm): 5.4
 Persistence Factor: 0.7
 Analysis Year: 2010

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway: Victory Boulevard	At Grade	4	20	20
East-West Roadway: Olive Avenue	At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	212	924	145		N	126	796	156	
W	<	v	>	E	W	<	v	>	E
150 ^				120	148 ^				205
460 >				865	998 >				671
29 v				102	38 v				119
S	43	590	110		S	60	807	199	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	2,141	N-S Road	2,238
E-W Road	1,802	E-W Road	2,348

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	2,141	*	5.56	÷	100,000
E-W Road	2.2	1.7	1.1	*	1,802	*	5.56	÷	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	2,238	*	5.56	÷	100,000
E-W Road	5.4	3.8	1.6	*	2,348	*	5.56	÷	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	8.7	8.8	6.1
100 Feet from Roadway Edge	8.4	8.5	5.9
300 Feet from Roadway Edge	8.1	8.1	5.6

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Verdugo Avenue and Hollywood Way
 Analysis Condition: Future (2008) With Project
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 7.8
 Background 8-hour CO Concentration (ppm): 5.4
 Persistence Factor: 0.7
 Analysis Year: 2010

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway:	Hollywood Way	At Grade	4	10
East-West Roadway:	Verdugo Avenue	At Grade	4	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak				P.M. Peak			
N	110	1,529	39	N	137	1,137	118
W	<	v	>	W	<	v	>
254 ^			88	319 ^			118
282 >			247	453 >			412
87 v			171	53 v			105
S	29	644	46	S	87	1,417	125

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	2,664	N-S Road	3,246
E-W Road	1,009	E-W Road	1,461

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	2,664	*	10.81	+	100,000
E-W Road	2.2	1.7	1.1	*	1,009	*	5.56	+	100,000
P.M. Peak Hour									
N-S Road	5.4	3.8	1.6	*	3,246	*	10.81	+	100,000
E-W Road	2.2	1.7	1.1	*	1,461	*	5.56	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	9.5	9.9	6.9
100 Feet from Roadway Edge	9.0	9.3	6.4
300 Feet from Roadway Edge	8.3	8.5	5.9

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Sparks Street and Olive Avenue
 Analysis Condition: Future (2008) With Project
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 7.8
 Background 8-hour CO Concentration (ppm): 5.4
 Persistence Factor: 0.7
 Analysis Year: 2010

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway: Sparks Street	At Grade	4	20	20
East-West Roadway: Olive Avenue	At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	42	26	15		N	38	29	41	
W	<	v	>	E	W	<	v	>	E
237 ^				217	290 ^				238
701 >				1,002	1,303 >				714
101 v				167	137 v				28
S	31	5	18		S	158	243	59	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	542	N-S Road	879
E-W Road	2,120	E-W Road	2,640

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	542	*	5.56	+	100,000
E-W Road	5.4	3.8	1.6	*	2,120	*	5.56	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.1	*	879	*	5.56	+	100,000
E-W Road	5.4	3.8	1.6	*	2,640	*	5.56	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	8.5	8.7	6.0
100 Feet from Roadway Edge	8.3	8.4	5.8
300 Feet from Roadway Edge	8.0	8.1	5.6

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Oak Street and California Street
 Analysis Condition: Future (2008) With Project
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 7.8
 Background 8-hour CO Concentration (ppm): 5.4
 Persistence Factor: 0.7
 Analysis Year: 2010

	Roadway Type	No. of Lanes	Average Cruise Speed	
			A.M.	P.M.
North-South Roadway:	California Street	At Grade	2	20
East-West Roadway:	Oak Street	At Grade	2	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	8	16	0		N	19	17	0	
W	<	v	>	E	W	<	v	>	E
8 ^				0	16 ^				4
43 >				44	95 >				114
16 v				3	11 v				5
S	3	14	0		S	11	30	10	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	52	N-S Road	86
E-W Road	122	E-W Road	266

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	52	*	5.56	+	100,000
E-W Road	5.7	4.0	1.7	*	122	*	5.56	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	86	*	5.56	+	100,000
E-W Road	5.7	4.0	1.7	*	266	*	5.56	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	7.8	7.9	5.5
100 Feet from Roadway Edge	7.8	7.9	5.4
300 Feet from Roadway Edge	7.8	7.8	5.4

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Alameda Avenue and Keystone Street
 Analysis Condition: Future (2008) With Project
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 7.8
 Background 8-hour CO Concentration (ppm): 5.4
 Persistence Factor: 0.7
 Analysis Year: 2010

North-South Roadway:	Keystone Street	Roadway Type	No. of Lanes	Average Cruise Speed	
				A.M.	P.M.
East-West Roadway:	Alameda Avenue	At Grade	2	20	20
		At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	21	27	27		N	20	18	23	
W	<	v	>	E	W	<	v	>	E
15 ^				28	27 ^				35
559 >				1,090	1,034 >				723
56 v				53	26 v				14
S	26	9	12		S	12	29	33	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	183	N-S Road	152
E-W Road	1,769	E-W Road	1,862

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	183	*	5.56	+	100,000
E-W Road	5.4	3.8	1.6	*	1,769	*	5.56	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	152	*	5.56	+	100,000
E-W Road	5.4	3.8	1.6	*	1,862	*	5.56	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	8.4	8.4	5.8
100 Feet from Roadway Edge	8.2	8.2	5.7
300 Feet from Roadway Edge	8.0	8.0	5.5

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

Project Title: NBC Studios
 Intersection: Alameda Avenue and Lake Street
 Analysis Condition: Future (2008) With Project
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 7.8
 Background 8-hour CO Concentration (ppm): 5.4
 Persistence Factor: 0.7
 Analysis Year: 2010

Roadway Type	No. of Lanes	Average Cruise Speed	
		A.M.	P.M.
North-South Roadway: Lake Street	At Grade	2	20
East-West Roadway: Alameda Avenue	At Grade	4	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES

A.M. Peak					P.M. Peak				
N	82	38	205		N	62	111	371	
W	<	v	>	E	W	<	v	>	E
46 ^				182	60 ^				180
837 >				1,373	1,589 >				898
42 v				49	80 v				74
	<	^	>			<	^	>	
S	80	61	80		S	46	53	46	

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	614	N-S Road	837
E-W Road	2,726	E-W Road	3,158

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	614	*	5.56	÷	100,000
E-W Road	5.4	3.8	1.6	*	2,726	*	5.56	÷	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	837	*	5.56	÷	100,000
E-W Road	5.4	3.8	1.6	*	3,158	*	5.56	÷	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	8.7	8.9	6.1
100 Feet from Roadway Edge	8.4	8.5	5.9
300 Feet from Roadway Edge	8.1	8.1	5.6

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS

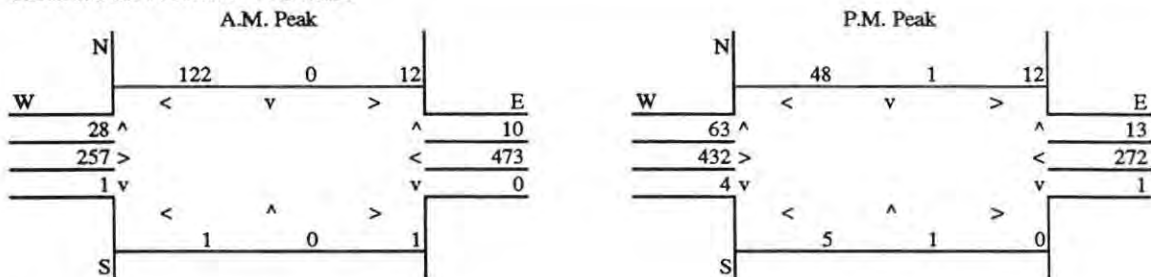
Project Title: NBC Studios
 Intersection: Riverside Drive and Keystone Street
 Analysis Condition: Future (2008) With Project
 Nearest Air Monitoring Station measuring CO: Burbank
 Background 1-hour CO Concentration (ppm): 7.8
 Background 8-hour CO Concentration (ppm): 5.4
 Persistence Factor: 0.7
 Analysis Year: 2010

North-South Roadway:	Keystone Street	Roadway Type	No. of Lanes	Average Cruise Speed	
				A.M.	P.M.
East-West Roadway:	Riverside Drive	At Grade	2	20	20
		At Grade	4	20	20

EMFAC7F COMPOSITE EMISSION FACTORS FOR CO

Year	Average Speed (miles per hour)									
	10	15	20	25	30	35	40	45	50	55
1995	34.80	23.52	17.90	14.53	12.25	10.60	9.40	8.61	8.25	8.50
2000	22.90	15.52	11.76	9.51	8.00	6.92	6.13	5.60	5.33	5.41
2005	14.76	10.00	7.57	6.11	5.14	4.46	3.99	3.68	3.55	3.68
2010	10.81	7.35	5.56	4.48	3.78	3.29	2.96	2.76	2.70	2.85

PEAK HOUR TURNING VOLUMES



Representative Traffic Volumes (Vehicles per Hour)

N-S Road	172	N-S Road	138
E-W Road	882	E-W Road	824

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations				Traffic Volume		Emission Factor		
	50 Feet	100 Feet	300 Feet						
A.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	172	*	5.56	+	100,000
E-W Road	5.4	3.8	1.6	*	882	*	5.56	+	100,000
P.M. Peak Hour									
N-S Road	2.2	1.7	1.0	*	138	*	5.56	+	100,000
E-W Road	5.4	3.8	1.6	*	824	*	5.56	+	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
50 Feet from Roadway Edge	8.1	8.1	5.6
100 Feet from Roadway Edge	8.0	8.0	5.5
300 Feet from Roadway Edge	7.9	7.9	5.5

**SCAQMD
CEQA Air Quality Handbook
Mitigation Measures**

Table 11-2. Mitigation for On-Road Mobile Source Emissions - Construction

Mitigation Measure	Emission Reduction Efficiency*			
	ROC	NO _x	CO	PM10
• Configure construction parking to minimize traffic interference	NQ			
• Provide temporary traffic control during all phases of construction activities to improve traffic flow (e.g., flag person)	NQ			
• Schedule construction activities that affect traffic flow to off-peak hours (e.g., between 7:00 p.m. and 6:00 a.m. and between 10:00 a.m. and 3:00 p.m.)	NQ			
• Develop a trip reduction plan to achieve a 1.5 AVR for construction employees	0.1-2.2%	0.1-2.9%	0.1-2.9%	0.1-2.9%
• Implement a shuttle service to and from retail services and food establishments during lunch hours	0.1-1.0%	0.1-1.3%	0.1-1.3%	0.1-1.3%
• Develop a construction traffic management plan that includes, but is not limited to:	NQ			
- Rerouting construction trucks off congested streets				
- Consolidating truck deliveries				
- Providing dedicated turn lanes for movement of construction trucks and equipment on- and off-site				
• Prohibit truck idling in excess of two minutes	NQ			

NQ = Not Quantified

* These efficiencies represent additive reductions from unmitigated on-road mobile source construction emissions (Table 9-3). The resulting emission reductions can be subtracted from the unmitigated totals. These data will be updated as more information becomes available. More detailed descriptions of mitigation measures are included in Appendix 11.

When efficiency is provided as a range:

if project-specific efficiency is unknown, use the lowest number given;

if project-specific efficiency is utilized, provide supporting analysis and documentation.

Source: SCAQMD, CEQA Air Quality Handbook.

Table 11-4. Mitigation for PM10 Emissions - Construction

Mitigation Measure	Emission Reduction Efficiency*			
	ROC	NO _x	CO	PM10
GRADING <ul style="list-style-type: none"> • Apply non-toxic soil stabilizers according to manufacturers' specification to all inactive construction areas (previously graded areas inactive for ten days or more) • Replace ground cover in disturbed areas as quickly as possible • Enclose, cover, water twice daily or apply non-toxic soil binders according to manufacturers' specifications, to exposed piles (i.e., gravel, sand, dirt) with 5% or greater silt content • Water active sites at least twice daily • Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph • Monitor for particulate emissions according to District-specified procedures. For information, call (714) 396-3600. • All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer) in accordance with the requirements of CVC Section 23114 				30-65% 15-49% 30-74% 34-68% NQ NQ 7-14%
PAVED ROADS <ul style="list-style-type: none"> • Sweep streets at the end of the day if visible soil material is carried onto adjacent public paved roads (recommend water sweepers with reclaimed water) • Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip 				25-60% 40-70%
NQ = Not Quantified				

* These efficiencies represent additive reductions from unmitigated PM10 construction emissions (Table 9-3). The resulting emission reductions can be subtracted from the unmitigated subtotals (Unpaved Road, Paved Road, Demolition, Grading, Asbestos). These data will be updated as more information becomes available. More detailed descriptions of mitigation measures are included in Appendix 11.

** Additive reductions: Reductions in emissions obtained from one source category, then added to that from another source category.

When efficiency is provided as a range:

if project-specific efficiency is unknown, use the lowest number given;

if project-specific efficiency is utilized, provide supporting analysis and documentation.

(continued on next page)

Table 11-4. Mitigation for PM10 Emissions - Construction (continued)

Mitigation Measure	Emission Reduction Efficiency*			
	ROC	NO _x	CO	PM10
UNPAVED ROADS <ul style="list-style-type: none"> • Apply water three times daily, or non-toxic soil stabilizers according to manufacturers' specifications, to all unpaved parking or staging areas or unpaved road surfaces • Traffic speeds on all unpaved roads to be reduced to 15 mph or less • Pave construction roads that have a traffic volume of more than 50 daily trips by construction equipment, 150 total daily trips for all vehicles • Pave all construction access roads at least 100 feet on to the site from the main road • Pave construction roads that have a daily traffic volume of less than 50 vehicular trips 				45-85%
				40-70%
				92.5%
				92.5%
				92.5%
NQ = Not Quantified				

* These efficiencies represent additive reductions from unmitigated PM10 construction emissions (Table 9-2). The resulting emission reductions can be subtracted from the unmitigated subtotals (Unpaved Road, Paved Road, Demolition, Grading, Asbestos). These data will be updated as more information becomes available. More detailed descriptions of mitigation measures are included in Appendix 11.

** Additive reductions: Reductions in emissions obtained from one source category, then added to that from another source category.

When efficiency is provided as a range:

if project-specific efficiency is unknown, use the lowest number given;

if project-specific efficiency is utilized, provide supporting analysis and documentation.

Table 11-6b. Mitigation for On-Road Mobile Source Emissions - Operation (Commerical)

Mitigation Measure	Emission Reduction Efficiency*			
	ROC	NO _x	CO	PM10
<ul style="list-style-type: none"> • Provide preferential parking spaces for carpools and vanpools and provide 7'2" minimum vertical clearance in parking facilities for vanpool access 	0.1-1.0%	0.1-1.3%	0.1-1.3%	0.1-1.3%
<ul style="list-style-type: none"> • Implement on-site circulation plan in parking lots to reduce vehicle queuing 	NQ			
<ul style="list-style-type: none"> • Improve traffic flow at drive-throughs by designing separate windows for different functions and by providing temporary parking for orders not immediately ready for pickup 	NQ			
<ul style="list-style-type: none"> • Provide video-conference facilities 	NQ			
<ul style="list-style-type: none"> • Set up resident worker training programs to improve job/housing balance 	NQ			
<ul style="list-style-type: none"> • Implement home dispatching system where employees receive routing schedule by phone instead of driving to work 	Negl.	0.1%	0.1%	0.1%
<ul style="list-style-type: none"> • Develop a program to minimize the use of fleet vehicles during smog alerts (for businesses not subject to Regulation XV or XII) 	NQ			
<ul style="list-style-type: none"> • Use low-emission fleet vehicles <ul style="list-style-type: none"> - TLEV - ULEV - LEV - ZEV 	NQ			
<ul style="list-style-type: none"> • Reduce employee parking spaces for those businesses subject to Regulation XV 	0.1-2.2%	0.1-2.9%	0.1-2.9%	0.1-2.9%
NQ = Not Quantified Negl. = Negligible (less than 0.05%)				

* These efficiencies represent additive reductions from facility operations, specifically unmitigated emissions from On-Road Mobile Sources (i.e., Work Trips, Non-Work Trips, Congestion Relief, Truck Trips, Off-Road Vehicles). These efficiencies can be subtracted from the corresponding unmitigated emissions from this category (Table 9-7). These data will be updated as more information becomes available. More detailed descriptions of mitigation measures are included in Appendix 11.

When efficiency is provided as a range:

if project-specific efficiency is unknown, use the lowest number given;

if project-specific efficiency is utilized, provide supporting analysis and documentation.

(continued on next page)

Table 11-6b. Mitigation for On-Road Mobile Source Emissions - Operation (Commercial) (continued)

Mitigation Measure	Emission Reduction Efficiency*			
	ROC	NO _x	CO	PM ₁₀
• Implement a lunch shuttle service from a worksite(s) to food establishments	0.4-1.5%	0.5-1.8%	0.5-1.8%	0.5-1.8%
• Implement compressed work-week schedules where weekly work hours are compressed into fewer than five days				
- 9/80	0.8-7.6%	1.0-10.0%	1.0-10.0%	1.0-10.0%
- 4/40	1.5-15.3%	2.0-20.0%	2.0-20.0%	2.0-20.0%
- 3/36	3.1-40.0%	4.0-40.0%	4.0-40.0%	4.0-40.0%
• Develop a trip reduction plan to achieve 1.5 AVR for businesses with less than 100 employees or multi-tenant worksites	0.1-2.2%	0.1-2.9%	0.1-2.9%	0.1-2.9%
• Utilize satellite offices rather than regular worksite to reduce VMT	0.1%	0.1-0.2%	0.1-0.2%	0.1-0.2%
• Establish a home-based telecommuting program	0.1-1.6%	0.1-2.1%	0.1-2.1%	0.1-2.1%
• Provide on-site child care and after-school facilities or contribute to off-site development within walking distance	0.1%	0.1-0.2%	0.1-0.2%	0.1-0.2%
• Require retail facilities or special event centers to offer travel incentives such as discounts on purchases for transit riders	NQ			
• Provide on-site employee services such as cafeterias, banks, etc.	0.2-3.4%	0.3-4.5%	0.3-4.5%	0.3-4.5%
• Establish a shuttle service from residential core areas to the worksite	0.1-0.3%	0.1-0.5%	0.1-0.5%	0.1-0.5%
• Construct on-site or off-site bus turnouts, passenger benches, or shelters	0.1-1.0%	0.1-1.3%	0.1-1.3%	0.1-1.3%

NQ = Not Quantified

* These efficiencies represent additive reductions from facility operations, specifically unmitigated emissions from On-Road Mobile Sources (i.e., Work Trips, Non-Work Trips, Congestion Relief, Truck Trips, Off-Road Vehicles). These efficiencies can be subtracted from the corresponding unmitigated emissions from this category (Table 9-7). These data will be updated as more information becomes available. More detailed descriptions of mitigation measures are included in Appendix 11.

When efficiency is provided as a range:

if project-specific efficiency is unknown, use the lowest number given;

if project-specific efficiency is utilized, provide supporting analysis and documentation.

(continued on next page)

Table 11-6b. Mitigation for On-Road Mobile Source Emissions - Operation (Commercial) (continued)

Mitigation Measure	Emission Reduction Efficiency*			
	ROC	NO _x	CO	PM ₁₀
• Implement a pricing structure for single-occupancy employee parking and/or provide discounts to ridesharers	1.5-11.0%	2.0-15.5%	2.0-15.5%	2.0-15.5%
• Include residential units within a commercial project	3.1-13.7%	4.0-18.0%	4.0-18.0%	4.0-18.0%
• Utilize parking in excess of code requirements as on-site park-n-ride lots or contribute to construction of off-site lots	0.1%	0.1-0.2%	0.1-0.2%	0.1-0.2%
• Any two of the following:				
— Construct off-site bicycle facility improvements, such as bicycle trails linking the facility to designated bicycle commuting routes, or on-site improvements, such as bicycle paths	0.2-2.4%	0.3-3.2%	0.3-3.2%	0.3-3.2%
— Include bicycle parking facilities, such as bicycle lockers and racks	See Above			
— Include showers for bicycling employees' use	See Above			
• Any two of the following:				
— Construct off-site pedestrian facility improvements, such as overpasses, wider sidewalks	0.2-1.2%	0.2-1.6%	0.2-1.6%	0.2-1.6%
— Construct on-site pedestrian facility improvements, such as building access which is physically separated from street and parking lot traffic and walk paths	See Above			
— Include showers for pedestrian employees' use	See Above			
• Provide shuttles to major rail transit stations and multi-modal centers	0.1-0.3%	0.1-0.5%	0.1-0.5%	0.1-0.5%

* These efficiencies represent additive reductions from facility operations, specifically unmitigated emissions from On-Road Mobile Sources (i.e., Work Trips, Non-Work Trips, Congestion Relief, Truck Trips, Off-Road Vehicles). These efficiencies can be subtracted from the corresponding unmitigated emissions from this category (Table 9-7). These data will be updated as more information becomes available. More detailed descriptions of mitigation measures are included in Appendix 11.

When efficiency is provided as a range:

if project-specific efficiency is unknown, use the lowest number given;

if project-specific efficiency is utilized, provide supporting analysis and documentation.

(continued on next page)

Table 11-6b. Mitigation for On-Road Mobile Source Emissions - Operation (Commercial) (continued)

Mitigation Measure	Emission Reduction Efficiency*			
	ROC	NO _x	CO	PM10
<ul style="list-style-type: none"> Contribute to regional transit systems (e.g., right-of-way, capital improvements) 	NQ			
<ul style="list-style-type: none"> Charge visitors to park 	1.5-11.0%	2.0-15.5%	2.0-15.5%	2.0-15.5%
<ul style="list-style-type: none"> Synchronize traffic lights on streets impacted by development 	4.0-8.0%	4.0-8.0%	4.0-8.0%	4.0-8.0%
<ul style="list-style-type: none"> Reschedule truck deliveries and pickups for off-peak hours 	NQ			
<ul style="list-style-type: none"> Set up paid parking systems where drivers pay at walkup kiosk and exit via a stamped ticket to reduce emissions from queuing vehicles 	NQ			
<ul style="list-style-type: none"> Require on-site truck loading zones 	NQ			
<ul style="list-style-type: none"> Implement or contribute to public outreach programs 	NQ			
<ul style="list-style-type: none"> Require employers not subject to Regulation XV to provide commuter information areas 	0.1-0.4%	0.1-0.5%	0.1-0.5%	0.1-0.5%

NQ = Not Quantified

* These efficiencies represent additive reductions from facility operations, specifically unmitigated emissions from On-Road Mobile Sources (i.e., Work Trips, Non-Work Trips, Congestion Relief, Truck Trips, Off-Road Vehicles). These efficiencies can be subtracted from the corresponding unmitigated emissions from this category (Table 9-7). These data will be updated as more information becomes available. More detailed descriptions of mitigation measures are included in Appendix 11.

When efficiency is provided as a range:

if project-specific efficiency is unknown, use the lowest number given;

if project-specific efficiency is utilized, provide supporting analysis and documentation.

Table 11-6c. Mitigation for On-Road Mobile Source Emissions - Operation (Industrial)

Mitigation Measure	Emission Reduction Efficiency*			
	ROC	NO _x	CO	PM10
<ul style="list-style-type: none"> • Provide preferential parking spaces for carpools and vanpools and provide 7'2" minimum vertical clearance in parking facilities for vanpool access 	0.1-1.0%	0.1-0.3%	0.1-0.3%	0.1-0.3%
<ul style="list-style-type: none"> • Implement on-site circulation plan in parking lots to reduce vehicle queuing 	NQ			
<ul style="list-style-type: none"> • Set up resident worker training programs to improve job/housing balance 	NQ			
<ul style="list-style-type: none"> • Implement home dispatching system where employees receive routing schedule by phone instead of driving to work 	Negl.	0.1%	0.1%	0.1%
<ul style="list-style-type: none"> • Develop a program to minimize the use of fleet vehicles during smog alerts (for businesses not subject to Regulation XV or XII) 	NQ			
<ul style="list-style-type: none"> • Use low-emission fleet vehicles <ul style="list-style-type: none"> - TLEV - ULEV - LEV - ZEV 	NQ			
<ul style="list-style-type: none"> • Require employers not subject to Regulation XV to provide commuter information areas 	Negl.-0.6%	Negl.-0.8%	Negl.-0.8%	Negl.-0.8%
<ul style="list-style-type: none"> • Reduce employee parking spaces for those businesses subject to Regulation XV 	0.1-2.2%	0.1-2.9%	0.1-2.9%	0.1-2.9%
NQ = Not Quantified Negl. = Negligible (less than 0.05%)				

* These efficiencies represent additive reductions from facility operations, specifically unmitigated emissions from On-Road Mobile Sources (i.e., Work Trips, Non-Work Trips, Congestion Relief, Truck Trips, Off-Road Vehicles). These efficiencies can be subtracted from the corresponding unmitigated emissions from this category (Table 9-7). These data will be updated as more information becomes available. More detailed descriptions of mitigation measures are included in Appendix 11.

When efficiency is provided as a range:

if project-specific efficiency is unknown, use the lowest number given;

if project-specific efficiency is utilized, provide supporting analysis and documentation.

(continued on next page)

Table 11-6c. Mitigation for On-Road Mobile Source Emissions - Operation (Industrial) (continued)

Mitigation Measure	Emission Reduction Efficiency*			
	ROC	NO _x	CO	PM10
<ul style="list-style-type: none"> Implement compressed work-week schedules where weekly work hours are compressed into fewer than five days <ul style="list-style-type: none"> - 9/80 - 4/40 - 3/36 	0.8-7.6% 1.5-15.3% 3.1-40.0%	1.0-10.0% 2.0-20.0% 4.0-40.0%	1.0-10.0% 2.0-20.0% 4.0-40.0%	1.0-10.0% 2.0-20.0% 4.0-40.0%
<ul style="list-style-type: none"> Offer first right of refusal, low-interest loans, or other incentives to employees who purchase or rent local residences 	NQ			
<ul style="list-style-type: none"> Develop a trip reduction plan to achieve 1.5 AVR for businesses with less than 100 employees or multi-tenant worksites 	0.1-2.2%	0.1-2.9%	0.1-2.9%	0.1-2.9%
<ul style="list-style-type: none"> Provide on-site child care and after-school facilities or contribute to development within walking distance 	0.1%	0.1-0.2%	0.1-0.2%	0.1-0.2%
<ul style="list-style-type: none"> Provide on-site employee services such as cafeterias, banks, etc. 	0.2-3.4%	0.3-4.5%	0.3-4.5%	0.3-4.5%
<ul style="list-style-type: none"> Establish a shuttle service from residential core areas to the worksite 	0.1-0.3%	0.1-0.5%	0.1-0.5%	0.1-0.5%
<ul style="list-style-type: none"> Construct on-site or off-site bus turnouts, passenger benches, or shelters 	0.1-1.0%	0.1-1.3%	0.1-1.3%	0.1-1.3%
<ul style="list-style-type: none"> Implement a pricing structure for single-occupancy employee parking and/or provide discounts to ridesharers 	1.5-11.0%	2.0-15.5%	2.0-15.5%	2.0-15.5%
<ul style="list-style-type: none"> Utilize parking in excess of code requirements as on-site park-n-ride lots or contribute to construction of off-site lots 	0.1%	0.1-0.2%	0.1-0.2%	0.1-0.2%

NQ = Not Quantified

* These efficiencies represent additive reductions from facility operations, specifically unmitigated emissions from On-Road Mobile Sources (i.e., Work Trips, Non-Work Trips, Congestion Relief, Truck Trips, Off-Road Vehicles). These efficiencies can be subtracted from the corresponding unmitigated emissions from this category (Table 9-7). These data will be updated as more information becomes available. More detailed descriptions of mitigation measures are included in Appendix 11.

When efficiency is provided as a range:

if project-specific efficiency is unknown, use the lowest number given;

if project-specific efficiency is utilized, provide supporting analysis and documentation.

(continued on next page)

Table 11-6c. Mitigation for On-Road Mobile Source Emissions - Operation (Industrial) (continued)

Mitigation Measure	Emission Reduction Efficiency*			
	ROC	NO _x	CO	PM10
<ul style="list-style-type: none"> Any two of the following: <ul style="list-style-type: none"> Construct off-site bicycle facility improvements, such as bicycle trails linking the facility to designated bicycle commuting routes, or on-site improvements, such as bicycle paths Include bicycle parking facilities, such as bicycle lockers and racks Include showers for bicycling employees' use Any two of the following: <ul style="list-style-type: none"> Construct off-site pedestrian facility improvements, such as overpasses, wider sidewalks Construct on-site pedestrian facility improvements, such as building access which is physically separated from street and parking lot traffic and walk paths Include showers for pedestrian employees' use Provide shuttles to major rail transit stations and multi-modal centers Contribute to regional transit systems (e.g., right-of-way, capital improvements) Synchronize traffic lights on streets impacted by development 	0.2-2.4%	0.3-3.2%	0.3-3.2%	0.3-3.2%
	See Above			
	See Above			
	0.2-1.2%	0.2-1.6%	0.2-1.6%	0.2-1.6%
	See Above			
	See Above			
	0.1-0.3%	0.1-0.5%	0.1-0.5%	0.1-0.5%
	NQ			
	4.0-8.0%	4.0-8.0%	4.0-8.0%	4.0-8.0%

NQ = Not Quantified

* These efficiencies represent additive reductions from facility operations, specifically unmitigated emissions from On-Road Mobile Sources (i.e., Work Trips, Non-Work Trips, Congestion Relief, Truck Trips, Off-Road Vehicles). These efficiencies can be subtracted from the corresponding unmitigated emissions from this category (Table 9-7). These data will be updated as more information becomes available. More detailed descriptions of mitigation measures are included in Appendix 11.

When efficiency is provided as a range:

if project-specific efficiency is unknown, use the lowest number given;

if project-specific efficiency is utilized, provide supporting analysis and documentation.

(continued on next page)

Table 11-6c. Mitigation for On-Road Mobile Source Emissions- Operation (Industrial) (continued)

Mitigation Measure	Emission Reduction Efficiency*			
	ROC	NO _x	CO	PM10
<ul style="list-style-type: none"> • Reschedule truck deliveries and pickups for off-peak hours 	NQ			
<ul style="list-style-type: none"> • Implement a lunch shuttle from a worksite(s) to food establishments 	0.4-1.5%	0.5-1.8%	0.5-1.8%	0.5-1.8%
<ul style="list-style-type: none"> • Require on-site truck loading zones 	NQ			
<ul style="list-style-type: none"> • Install aerodynamic add-on devices to heavy-duty trucks 	NQ			
<ul style="list-style-type: none"> • Implement or contribute to public outreach programs 	NQ			
<ul style="list-style-type: none"> • Reduce ship cruising speeds in the inner harbor 	NQ			
<ul style="list-style-type: none"> • Use low-emission fuels or electrify airport ground service vehicles 	NQ			
<ul style="list-style-type: none"> • Engine tuning for marine vessels (e.g., injection timing retard) 	NQ			
<ul style="list-style-type: none"> • Reduce number of aircraft engines used during idling 	NQ			
<ul style="list-style-type: none"> • Install monitoring system to control airport shuttles 	NQ			
<ul style="list-style-type: none"> • Use centralized ground power systems for airport service vehicles 	NQ			
NQ = Not Quantified				

* These efficiencies represent additive reductions from facility operations, specifically unmitigated emissions from On-Road Mobile Sources (i.e., Work Trips, Non-Work Trips, Congestion Relief, Truck Trips, Off-Road Vehicles). These efficiencies can be subtracted from the corresponding unmitigated emissions from this category (Table 9-7). These data will be updated as more information becomes available. More detailed descriptions of mitigation measures are included in Appendix 11.

When efficiency is provided as a range:

if project-specific efficiency is unknown, use the lowest number given;

if project-specific efficiency is utilized, provide supporting analysis and documentation.

Table 11-7b. Mitigation for Stationary Source Emissions - Operation (Commerical)

Mitigation Measure	Emission Reduction Efficiency*			
	ROC	NO _x	CO	PM ₁₀
• Use solar or low-emission water heaters	0.5%	0.5%	0.5%	0.5%
• Use central water heating systems	0.5%	0.5%	0.5%	0.5%
• Provide shade trees to reduce building heating/cooling needs	0.5%	0.5%	0.5%	1%
• Use energy-efficient and automated controls for air conditioners	1%	1%	1%	1.5%
• Use double-glass-paned windows	3.5%	3%	3%	2.5%
• Use energy-efficient low-sodium parking lot lights	Negl.	Negl.	Negl.	Negl.
• Provide adequate ventilation systems for enclosed parking facilities	—	—	—	0.5%
• Use lighting controls and energy-efficient lighting	3%	8.5%	7%	19.5%
• Use light-colored roof materials to reflect heat	1%	1%	1%	0.5%
• Increase walls and attic insulation beyond Title 24 requirements	10%	9%	9.5%	7%
• Orient buildings to the north for natural cooling and include passive solar design (e.g., daylighting)	11%	13.5%	12.5%	17.5%
Negl. = Negligible (less than 0.05%)				

* These efficiencies represent additive reductions from facility operations, specifically unmitigated emissions from Stationary Sources (i.e., Energy Use, Area Source, Stationary Source). These efficiencies can be subtracted from the corresponding unmitigated emissions from this category (Table 9-8). These data will be updated as more information becomes available.
More detailed descriptions of mitigation measures are included in Appendix 11.

Source: SCAQMD, CEQA Air Quality Handbook.